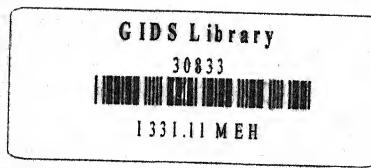


Access to Social Infrastructure and Human Resource Development in Uttarakhand

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ACCESS TO SOCIAL INFRASTRUCTURE AND HUMAN RESOURCE DEVELOPMENT IN UTTARAKHAND

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ACCESS TO SOCIAL INFRASTRUCTURE AND HUMAN RESOURCE DEVELOPMENT IN UTTARAKHAND

G.S. Mehta*

1.0 INTRODUCTION

Development of various social infrastructure facilities has been well considered to be an important and instrumental measure for the diversification of different economic activities and achieving economic development. Its importance is also quite significantly attached with bringing qualitative improvements in the standard of living and life-style of population, promoting productive efficiency and capability among human resources in the perspective to generate increasing amount of personal earnings and to increase their participation in the contribution of overall economic development processes. In this context, expenditure on the expansion and development of various social infrastructural facilities which are, directly or indirectly, associated with the human resource development, has been viewed as investment on human capital since investment on human resources development provides direct or indirect returns in long term. To attain human development on a sustainable basis there is no better alternative than making essential social services like access to water, sanitation facilities, housing and shelter provisions. For economically and socially disadvantaged groups, access to basic social services or infrastructure is perhaps more important as they start with a disadvantage to benefit from mainstream national development initiatives.

The impact of providing increasing emphasis on adequate development of social infrastructure facilities necessarily tend to open the opportunities for developing various

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economic activities with minimising the cost of production, marketing and distribution besides widening employment and earning opportunities for different categories of human resources. Various studies also reveal the fact that every increase of educational level among human resources provides an additional amount of incomes to them.

1.1 The Issues

Thus given the general relationship between the level of social infrastructure development and human resource development, which process ultimately enhance the personal income of human resources, it is plausible that sufficiently development of various infrastructure facilities within accessible distances in different locations of backward areas and areas dominated by socio-economically disadvantaged segment of population would be a very meaningful instrumental effort for bringing reduction in persisting inequality of income distribution, which arising basically on account of uneven distribution of ownership of material resources and several regional and locational problems. The human capital theory also suggests that the social-infrastructure, especially education, acts as an equalizer of income distribution through promoting education among population with limited or no physical capital and other income generating resources. The higher economic status of certain group of population is seen partly to be a function of the degree of their participation in the utilization of educational opportunities and the result of availing various other social infrastructural facilities associated with promoting the quality of human resources.

Visualizing social infrastructure as an important instrument for improving socio-economic conditions and bringing about reduction in income inequalities and poverty,

among different segment of population a great significance is attached in all countries to the expansion and development of health, education, safe drinking water, housing and several related facilities, which are linked with human resource development. Subsidised educational opportunities in the form of books aid, scholarship, free tuition and several other incentives are also being provided in many cases for socially and economically disadvantaged groups of population. Even certain relaxations in the norms fixed for opening and development of various components of infrastructural facilities in particular to various remote and inaccessible areas are also made such that every group of population can avail various facilities in equitable manner.

1.2 The Objectives

Adequately and properly development of various social infrastructural facilities and their easy accessibility to different socio-economic groups of population in general and disadvantaged communities in particular have special significance in the development perspectives of socio-economically backward and hilly areas where the situation of unemployment and poverty have reached at a alarming stage and still increasing unprecedently. The mountain and hilly areas are absolutely lacking the possibility and potentials of diversification of its economy on a large scale due to existing several geographical, topographical, environmental and certain area specific natural problems. Also, a very fragile and sensitive ecological system of mountain areas is unlikely in a position to sustain the diversification of different economies at a greater extent. These basic problems arising as bottlenecks in the development have reduced the possibility of generating gainful employment at derived level and bringing reduction in the incidence of poverty in mountain areas. Despite the fact that mountain

areas are possessing certain area specific comparative advantages and niche over the plain areas for developing various economic activities.

With the existence of these basic problems limiting the scope for possible diversification of economy the low paid agricultural and allied activities are and expected to be in the near future, as the main source of employment and income for people in Uttarakhand. To some extent, the informal sector activities those are mainly in the form of small trading occupations, transport of passengers and goods within and outside region, processing goods for local requirements in micro-enterprises at household level through employing mainly household manpower, construction of buildings and roads and some self-employment categories of activities and professions have been developing with the expansion of infrastructural facilities, mainly as a result of developing road transport, in some part of the region. In fact, the employment in these low paid and economically unsustainable activities has been increasing at some extent.

In spite of initiating various measures and introducing variety of programmes for the promotion of industrial activities, which can provide remunerative employment opportunities to the human resources, the large industrial units could not be located in the region basically due to lack of entrepreneurship capabilities and investment capacity of local people, and lack of interest on the part of the entrepreneurs belonging to outside region due to inadequate development of various infrastructural facilities as required for establishing and development of different industrial units in Uttarakhand. As the consequences of very low level of income generation capacity of agricultural and various other non-farm informal sector economic activities the productive and skilled human resources are forced to migrate outside region in search of gainful employment opportunities.

The current situation is that a very high proportion of well-educated and productive manpower of Uttarakhand has been very successful in utilizing its productive skill and abilities for performing various kinds of high productive work and, as a result, in generating sufficient amount of income at the places of destinations And thus, the contribution of income of migrants through remittances is consequently, increasing in their household. Also, it has been well established the fact that the migrants are contributing significantly much higher amount of income for their households after migration as compared to what they were contributing before migration at their native place. Accordingly, the contribution of migrants in the process of overall development at the places of destinations cannot be over-estimated. Because, the increase in the personal income of migrants could be attributed as a reward of their increasing contribution to overall production and income of the concerned economic enterprises.

Since, the migrant human resources have been largely contributing in the economic development both at the places of destinations and natives through maximising the use of their acquired productive skill and educational attainment. The standard of living and quality of life-style of migrant households at native place has also been considerably increasing with the increasing share of income in the incomes of their households through remittances of migrants from outside Uttarakhand. However, a more striking point is that most of the human resources migrate outside region leaving their family members at the native place for the whole duration of migration, though in very few cases a part of the family members accompany to their migrant members at the latter stages of migration. But, a very high degree of return migration of human resources, mainly after retirement from employment has been experienced in the region. And thus, the contribution of migrant human resources in the income of their

household is a short-term phenomena, which can be sustained till the period of migration of human resources only. With the return migration of human resources back to their native place is resulting discontinuation of income as remittances and it adversely affecting the standard of living of household and the quality of life of the family members of migrants.

In such circumstances only an alternative option for sustaining income of different households in Uttarakhand would be in terms of seriously thinking about planning for developing various productive economic activities those are possessing greater development potentials, area specific niche and comparative advantages in their development and the potential to maximize the use of locally available natural and human resources without posing any adverse effects on the local environment and ecological system. In addition to this, it would be also more appropriate to think over for developing human resources according to the expected demand of various identified economic activities for initiating their development.

Moreover, planning for development of different categories of human resources would be an important instrumental initiative in the perspective of raising their productive efficiency and capacity to generate increasing amounts of incomes, along with enhancing their contribution in the process of development of Uttarakhand on sustainable manner. In fact, human resources equipped with certain know-how technology of production and entrepreneurship capability can well participate in the expansion and development of certain economic activities in the region itself. Even in the cases of migration of these highly productive human resources in different geographical locations and occupations will certainly provide them an opportunity in maximising their income and contribution in their household's income. Thus, it can be

attributed that bringing qualitative improvements among human resources will certainly bring a drastic reduction in the existing problems of poverty and unemployment among different segments of population in Uttarakhand.

Availability of various social infrastructural facilities at accessible distances to different community people, and their equitable utilization are visualized as the most important elements of human resource development. So, social infrastructure although often commonly reflected to, is somewhat undefined. However, from the point of view of the present study, we include those social services, which have been recognized as the key elements associated to bringing qualitative improvements and helping in enhancing the productive efficiency among human resources. These services include, education, health, clean and safe drinking water, sanitation, housing, electricity and information and communication facilities.

The importance of adequately development of various infrastructural facilities is also positively attached in bringing desired level of reduction in the pattern of out-migration of human resources. Since it is believed that lacking facilities of certain social infrastructure, particularly educational and medical facilities, is motivating a sizeable proportion of human resources to migrate outside region mainly in larger cities located in plain areas, to avail the facility of required infrastructure. In fact, people migrating for this purpose were observed hardly return back to the region, even after acquiring required facility sufficiently at the places of migration. In fact they settle down permanently at the places of destinations. In such a situation the contribution of these human resources in the development process of Uttarakhand cannot be recognize in any manner. So, access to different social infrastructural facilities and various amenities of life to different groups of population living in different geographical

locations would be essential initiative to check the flow of permanent migration of a larger group of population outside region and to strengthen their contribution in the development of the region.

1.3 The Present Study

In order to ensure that provision of providing various social infrastructural facilities can significantly bring qualitative improvements among human resources, social change, equality and reduction in existing poverty, the first important precondition is to provide equitable opportunities for these facilities with accessible distances to different socio-economic segments of population. In this context the present study is an attempt to examine, firstly, the existing situation, status and access to different social infrastructural facilities; secondly, the nature and extent of provisions, programmes and policies initiated for development and improving access to various infrastructural facilities in the past; and thirdly, the magnitude, feasibility and gaps arising in policy interventions and the implementations of policy programmes in view of local environment, requirements and perceptions.

Development of various infrastructural facilities, particularly, education, housing, drinking water supply, medical and health, electricity, road transport and communication etc. have been most priority areas of development in the past under various plans. Since the beginning of initiating separate development planning approach for Uttarakhand during Fourth Plan period, development and expansion of social services has been provided second most priority, after agriculture and rural development. Average share of social sector in the total outlay of Uttarakhand was 27.63 per cent during Seventh Plan as against the share of 33.53 per cent for agriculture and rural

development; though this share for social sector has declined at 23.18 per cent during Eighth Plan, but it further increased at 30.25 per cent for Ninth Plan. However, the actual amount of outlay provided for development of social services has been consistently increasing during the past plans. The financial outlay provided for the development of different social infrastructural facilities during Seventh Plan was Rs.297 crore, it increased at Rs.488 crore during Eighth Plan and Rs.1340.21 crore during Ninth Plan periods, showing an increase of over four-folds during last three plans. Further, we proceed to analyze in detail about the situation emerging in terms of availability of different social infrastructural facilities and their access to different communities at district level.

2.0 DEVELOPMENT OF EDUCATIONAL FACILITIES

Imparting education among human resources implies improvements in cognitive ability, technical skill and knowledge, productive efficiency and mobility in different occupations and geographical locations and thus enhances productivity and, as the consequence, raises earnings and income levels of individuals. Changes and improvements in the quality of life of human resources that are brought about by education constitute an important though often intangible source of economic development. The economic development depends ultimately upon to the quality of human resources and, more specifically on the creation of labourforce equipped with necessary skill to develop and use technology and an attitude conducive to the acceptance and promotion of economic and technical change. And, it is education that leads to the developments of these qualities of human resources. In order that education proves an instrument of social change, development and equity, the important precondition is that adequate opportunities for education are available and

different groups in the society have access to them. It is to this context that we devote our attention at examining the extent to which different levels of educational facilities are access to different groups of population across the district level in Uttarakhand.

2.1 Primary Education

The primary education consisted of Junior Basic and Senior Basic level education. The responsibility of providing the facility of primary education in Uttarakhand, especially in rural areas, rests mainly with the State Government through the Basic Shiksha Parishad. Though, various private organizations, trusts and indigenous organizations are also engaged in the expansion of pre-primary and primary level educational system in different areas, particularly in urban areas and adjoining areas of urban centres and nearby road areas.

In Uttarakhand, considerable emphasis has been placed on universalization of primary education as a part of the process of planned development. Special attention has been provided in the expansion of primary educational facilities in different remote and educationally backward areas and areas dominated by socially disadvantaged groups of population, such as Scheduled Castes and Scheduled Tribes. Considering into account the problems of geographical and topographical settings prevailing in Uttarakhand the norms and criteria fixed for the establishment of primary school facilities based on minimum coverage of population size and distance of village to the nearest school have been relaxed. According to the norms prevalent in Uttarakhand, a primary school should be established within a distance of one km. from a village and in habitations where the population exceeds 300 mark. In the recent past, initiatives have also been taken to appoint at least one woman teacher in every school. In view of

meeting the requirement of women teachers about 80 per cent of the total seats have been kept reserved for women candidates in the admission of teacher's training for primary level of education. During the period of Ninth Plan, Rs.4500 lakh, accounting around 17 per cent share in the total outlay has been proposed for the development of primary education in Uttarakhand. In addition to this, Rs.1348.90 lakh has been proposed for initiating non-formal education for such children those are unable to enrolled themselves in formal education system and those are dropping studies before the completion of primary education.

(a) Pattern of Expansion

In Uttarakhand, provision of Junior Basic School educational facility is quite inadequate, both in terms of numbers and geographical spread. Though, considerably larger increase in the expansion of schools has been carried out by the State Government in different districts of Uttarakhand. The number of Junior Basic Schools has been increased from 8679 in 1992 to 9650 in 1998 showing an overall increase of 11.19 per cent. The highest increase in the expansion of Junior Basic School is found in Chamoli (18.56 per cent), followed by 16.72 per cent in Nainital and 15.23 per cent in Pauri Garhwal. The Government seems providing a greater attention in expanding the facility of Senior Basic Schools as compared to the Junior Basic Schools in Uttarakhand, particularly in districts Almora, Uttarkashi, Chamoli and Dehradun. Since the latter category of schools are increasing at faster rate than the former category of schools in the hills as well as in these four districts, over the years. This could be basically due to the fact that the involvement of private organizations and trusts is consistently increasing in the establishment of Junior Basic School facilities rather than to expand Senior Basic the involvement of private organizations and trusts is

Table 1 : Expansion of Primary Schools

District	Junior Basic School		Senior Basic Schools		Percentage Increase	
	1992	1998	1992	1998	Junior Basic	Senior Basic
Almora	1505	1603	247	266	6.51	7.69
Nainital	1376	1606	341	344	16.72	0.88
Pithoragarh	1062	1118	231	241	5.27	4.33
Uttarkashi	486	527	135	163	8.44	20.74
Chamoli	873	1035	186	260	18.56	39.78
Tehri Garhwal	1057	1157	226	331	9.46	2.21
Dehradun	935	1008	212	247	7.81	16.51
Pauri Garhwal	1385	1596	251	252	15.23	0.40
Uttarakhand	8679	9650	1829	2104	11.19	15.04

Source : Shikshya Ki Pragati, 1993-94 and 1998-99

Table 2 : Teachers in Primary Education

District	Junior Basic School		Senior Basic Schools		Percentage Increase	
	1992	1998	1992	1998	Junior Basic	Senior Basic
Almora	3745	3990	1085	1000	6.54	-7.83
Nainital	3662	4547	1606	1628	24.17	1.37
Pithoragarh	2465	2688	1014	998	9.05	-1.58
Uttarkashi	980	1041	575	707	6.22	22.96
Chamoli	1708	1571	811	882	-8.02	8.75
Tehri Garhwal	1704	2589	859	964	51.94	12.22
Dehradun	3215	3255	1272	1398	1.24	9.20
Pauri Garhwal	2888	3384	1072	1036	17.17	3.56
Uttarakhand	20364	23065	8292	8604	13.26	3.76

Source : Shikshya Ki Pragati, 1994 and 1999

consistently increasing in the establishment of Junior Basic School facilities rather than to expand Senior Basic Schools facilities. Also the culture of establishing private schools in most of the rural areas as well as in small towns is developing very recently. And most of the Junior Basic Schools have not been upgraded to the level of Senior Basic Schools because the children studying in these private schools have not completed the classes of Junior Basic level. Annual growth of Senior Basic Schools has been estimated around 2.51 per cent as against 1.87 per cent for Junior Basic Schools. The number of Senior Basic Schools have increased from 1829 in 1992 to 2104 during 1998. Expansion of these level of educational institutions have been carried out at large scale in Chamoli (39.78 per cent) followed by 20.74 per cent in Uttarkashi and 16.51 per cent in Dehradun while at lowest level in Pauri Garhwal (0.40 per cent) followed by 0.88 per cent in Nainital, where the culture of establishing private schools has been an old tradition.

However, analysing the availability pattern of teachers imparting primary level of education we find that the number of teachers at both Junior Basic Schools and Senior Basic Schools are significantly increasing in most of the districts accepting the marginal decline of 1.58 per cent at Senior Basic Schools in Pithoragarh and 8.02 per cent at Junior Basic School level in Chamoli. The interesting picture which emerging in the increasing trend of teachers is that the numbers of teachers at Junior Basic level have been increasing at much higher rate (13.26 per cent) as compared to teachers at Senior Basic School level (3.76 per cent), while the situation is reversal in the growth rate of these two levels of educational institutions. The highest increase in the strength of teachers at Junior level school has been reported in District Tehri Garhwal (51.94 per cent) followed by Nainital (24.17 per cent) and lowest in Dehradun (1.24 per cent).

Similarly, the growth of teachers at Senior Basic School level is highest in Uttarkashi (22.96 per cent) and lowest in Nainital (1.37 per cent).

Analysing the pattern of enrolments of children at primary level educational system it is well depicted the fact that the importance of Government managed Junior Basic Schools is consistently declining while the parents are increasingly preferring to enroll their children in privately owned schools during the recent past. It is very surprising aspect that in spite of the initiation of various efforts and introductionj of variety of programmes by the Government for bringing more and more children in educational system the gross enrolments are consistently decreasing at different levels of education in spite the fact that there has been a significant increase in the population of children in the age group of below 14 years during the reference period of this analysis.

The enrolments of children at Junior Basic level of education have declined from 9.88 lakhs to 8.08 lakhs during the periods 1992 and 1998. The decreasing trends in enrolments of children has reached as high as more than one-third in Pithoragarh followed by 30.46 per cent in Pauri Garhwal and 25.13 per cent in Almora while only in Tehri Garhwal, it has marginally increased. Though, at the Senior Basic Educational level, the overall enrolments has increased from 1.95 lakhs in 1992 to 2.36 lakhs in 1998 showing an increase of 21.01 per cent. But, again in districts Uttarkashi, Chamoli and Pithoragarh the enrolments of children has substantially declined, though at highest level in Uttarkashi (39.19 per cent) followed by 17.97 per cent in Chamoli and 2.03 per cent in Pithoragarh.

Since, it was pointed out earlier that certain relaxation has been provided in opening of the primary schools in remote areas and areas dominated by Scheduled Castes and Scheduled Tribes population. In particular to SC/ST dominated areas the

population of school going age group of children should be at least more 40 for opening Junior Basic School. Considering the average strength of children per Junior Basic School we find that there has been a significant progress in providing the facility of this level of education in almost the districts of Uttarakhand. The number of children per school has decreased from 114 in 1992 to 84 in 1998, while the average population of children per school is reported lowest in Uttarkashi (52 children) closely followed by 63 children in Pauri and Chamoli (62 children) but the figure is highest for Nainital (105 children) during 1998.

The population of children per teacher has also been significantly declined in all the districts but a highest decrease was found in the case of district Pauri (40 per cent) during last six years. The overall ratio of students-teacher has declined from 48 students in 1992 to 35 students during 1998. Most of the districts, excepting Chamoli and Tehri Garhwal have well achieved the prescribed norms of providing at least one teacher against 40 enrolled children in each Junior Basic School. The lowest students-teacher ratio is reported in Uttarkashi followed by each Pauri and Pithoragarh (30 children).

Table 3 : Enrolments in Primary School

District	Junior Basic		Senior Basic		Percent Increase		Junior Basic School				Senior Basic School							
	1992	1998	1992	1998	Junior	Basic	1992	1998	Senior	Basic	1992	1998	No. of Children	Per School	Teacher-Students Ratio	No. of Children	Per School	Teacher-Students Ratio
					Basic	1992	1998	1992	1998	1992	1998	1992	1998	1992	1998	1992	1998	1992
Almora	183016	137026	19901	35894	-25.13	80.36	122	85	49	34	81	135	18	36				
Nainital	180998	168544	35998	50143	-6.88	39.29	132	105	49	37	106	146	22	31				
Pithoragarh	125645	80469	33876	33189	-35.96	-2.03	118	72	51	30	147	138	33	33				
Uttarkashi	31011	29587	11810	7182	-4.59	-39.19	64	56	32	28	87	44	21	10				
Chamoli	101981	72451	22703	18624	-28.96	-17.97	117	70	60	46	122	72	28	21				
Tehri	103543	105148	17903	22002	1.55	22.90	98	91	61	41	79	66	21	23				
Dehradun	117235	114589	30015	35156	-2.26	17.13	125	114	36	35	142	142	24	25				
Pauri	144164	100257	22948	33960	-30.46	47.99	104	63	50	30	91	135	21	33				
Uttarakhand	987593	808071	195154	236150	-18.18	21.01	114	84	48	35	107	112	24	27				

The average strength of children per Senior Basic School has been indicated increasing at higher level than at Junior Basic School in most of the districts, excepting in districts Uttarkashi and Tehri Garhwal. Also both, the number of children per school as well as students-teacher ratio at Senior Basic School level is increasing at the rate of 0.78 per cent and 2.08 per cent annually in Uttarakhand. The increasing pressure of children on the Senior Basic School is observed at highest level in district Almora (11.11 per cent) followed by Pauri Garhwal (8.06 per cent) and Nainital (6.29 per cent). Also, the students-teacher ratio is highest for these two districts during 1998.

(b) Access to Primary School Facilities

Analysis on the situation existing in terms of accessibility to Junior Basic School facility in different districts of Uttarakhand has been examined by distributing the revenue villages according to their distance from the nearest located Junior Basic School. We observed that the objective of opening Junior Basic School facility within a distance of one km. of inhabitant villages has been well achieved in most of the districts of Uttarakhand. Yet a significant number of very small villages those are widely spread over at larger distances in remote and high altitude areas of districts Almora, Pauri, Pithoragarh and Tehri Garhwal are still to cover for providing primary school facilities. The children of over 78 per cent villages have the facility of availing Junior Basic level education either within their villages itself (56.84 per cent) or after covering the distance of only less than one km. from their villages. However, the children of another 19.37 per cent and 2.28 per cent villages have the accessibility to Junior Basic education after covering the distance of 1 to 3 kms. and 3 to 5 kms. respectively. Still, 82 villages are located at the distance of above 5 kms. from the nearest located Junior Basic School from their villages. The highest level of progress that has been achieved in the

expansion of Junior Basic School at accessible distances of less than 1 km. to the children was found in district Nainital followed by Uttarkashi, Dehradun and Chamoli. While least progress is shown in districts Pithoragarh and Tehri Garhwal.

Table 4 : Access to Junior Basic School Facility

District	Number of Villages According to Distance from nearest School (Distance in Km.)					
	In the Village	Below 1 Km.	1 - 3	3 - 5	5 and above	Total
Almora	1472 (49.02)	736 (24.51)	745 (24.81)	41 (1.36)	9 (0.30)	3003 (100.00)
Nainital	1225 (70.04)	367 (20.98)	157 (8.98)	0	0	1749 (100.00)
Pithoragarh	1021 (47.01)	566 (26.06)	440 (20.26)	112 (5.15)	33 (1.52)	2172 (100.00)
Uttarkashi	545 (82.45)	63 (9.53)	48 (7.26)	5 (0.76)	0	661 (100.00)
Chamoli	1010 (65.04)	317 (20.41)	198 (12.75)	27 (1.74)	1 (0.06)	1553 (100.00)
Tehri Garhwal	1237 (63.60)	173 (8.89)	455 (23.39)	46 (2.37)	34 (1.75)	1945 (100.00)
Dehradun	558 (76.97)	73 (10.07)	67 (9.24)	22 (3.03)	5 (0.69)	725 (100.00)
Pauri Garhwal	1451 (45.61)	848 (26.66)	793 (24.93)	89 (2.80)	0	3181 (100.00)
Uttarakhand	8519 (56.84)	3143 (20.97)	2903 (19.37)	342 (2.28)	82 (0.54)	14989 (100.00)

Source : Statistical Diary Uttaranchal, Uttaranchal Division, State Planning Institute, U.P., Lucknow, 1999.

It may be mentioned here that there are no separate Government Junior Basic School for girls in Uttarakhand at present, though such schools existed during 1950-51 to 1970-71. At Senior Basic educational level, where separate facilities exist for girls, besides co-educational facilities in common institutions, the women's institutions have grown faster than common institutions. This indicates that considerable attention has been given to the expansion of this level of educational facilities for girls but the number of schools for girls are comparatively at lower proportions than that of boys.

Table 5 : Access to Senior Basic School (Boys) (1995)

District	Distance from Villages to Senior Basic School (in Km.)					
	In the Village	Below 1 Km.	1 - 3	3 - 5	5 and above	Total
Almora	199 (6.63)	321 (10.69)	1151 (38.32)	603 (20.08)	729 (24.28)	3003 (100.00)
Nainital	278 (15.89)	230 (13.15)	701 (40.08)	468 (26.76)	72 (4.12)	1749 (100.00)
Pithoragarh	214 (9.85)	342 (15.75)	658 (30.29)	439 (20.21)	519 (23.90)	2172 (100.00)
Uttarkashi	156 (23.60)	80 (12.10)	181 (27.38)	128 (19.36)	116 (17.56)	661 (100.00)
Chamoli	192 (12.36)	180 (11.59)	544 (35.03)	332 (21.38)	305 (19.64)	1553 (100.00)
Tehri Garhwal	247 (12.70)	221 (11.36)	736 (37.84)	337 (17.33)	404 (20.77)	1945 (100.00)
Dehradun	161 (22.21)	75 (10.34)	155 (21.38)	118 (16.28)	216 (29.79)	725 (100.00)
Pauri Garhwal	232 (7.29)	314 (9.87)	1038 (32.63)	556 (17.48)	1041 (32.73)	3181 (100.00)
Uttarakhand	1679 (11.20)	1763 (11.76)	5164 (34.45)	2981 (19.89)	3402 (22.70)	14989 (100.00)

Table 6 : Access to Senior Basic School (Girls) (1995)

District	Distance from Villages to Senior Basic School (in Km.)					
	In the Village	Below 1 Km.	1 - 3	3 - 5	5 and above	Total
Almora	22 (0.73)	106 (3.53)	377 (12.55)	219 (7.30)	2279 (75.89)	3003 (100.00)
Nainital	59 (3.37)	66 (3.77)	286 (16.35)	297 (16.98)	1041 (59.53)	1749 (100.00)
Pithoragarh	39 (1.79)	93 (4.28)	226 (10.41)	222 (10.22)	1592 (73.30)	2172 (100.00)
Uttarkashi	16 (2.42)	10 (1.51)	32 (4.84)	39 (5.90)	564 (85.33)	661 (100.00)
Chamoli	16 (1.03)	19 (1.22)	82 (5.28)	177 (11.40)	1259 (81.07)	1553 (100.00)
Tehri Garhwal	44 (2.26)	152 (7.81)	306 (15.73)	159 (8.18)	1284 (66.02)	1945 (100.00)
Dehradun	29 (4.00)	32 (4.41)	104 (14.34)	63 (8.69)	497 (68.56)	725 (100.00)
Pauri Garhwal	66 (2.07)	140 (4.40)	457 (14.37)	338 (10.63)	2180 (68.53)	3181 (100.00)
Uttarakhand	291 (1.94)	618 (4.12)	1870 (12.48)	1514 (10.10)	10696 (71.36)	14989 (100.00)

However, the Senior Basic Schools are more evenly distributed and are more accessible to boys than girls in almost the districts. Since the girls of very high proportion of 71.36 per cent villages as against the boys of 22.70 per cent villages are receiving the facility of availing Senior Basic School after covering more than 5 kms. Also only 1.94 villages have the facility of girls' senior school within their villages as against 11.20 per cent villages are provided the facility of boys' senior schools. A larger proportions of the boys (34.45 per cent) have to cover 1 to 3 kms. while another 19.89 per cent boys are covering the distance of 3 to 5 kms. for studying Senior Basic education in common schools. In all, the Government have to go long way in carrying the expansion of Senior Basic Schools for girls in almost the districts. Since visiting over 3 kms. for availing the opportunity of senior school facility is a very difficult task for girls in such a geographically difficult situations of hills.

The overall situation that emerging in the process of development of primary educational facilities across the district level is that the Government has increasingly been concerned in the establishment of primary school facilities along with providing special attention towards the appointments of teachers irrespective of keeping into consideration that whether the enrolments of children are increasing to the extent that the initiatives are undertaken in appointing teachers and expanding school facilities. Since both the number of schools as well as teachers in primary schools has been consistently increasing despite the considerable decline in enrolment rates of the children. This kind of problem has been arising basically due to lack of interest from the part of teachers in providing adequate attention in bringing qualitative improvements in teaching lessons to the students, irregular attendance of teachers in schools, lack of supervision from the part of the inspectors of schools, etc. The poor performance of Government schools in imparting better quality education has compelled the children to

enroll themselves in privately managed schools despite the fact that the private schools are charging comparatively much higher amounts of tuition fees while the government schools do not charge any fee.

2.2 Secondary Level Of Educational Schools

(a) Expansion

The Secondary Schools, comprising High School and Intermediate level of educational institutions, are established by Government as well as private organizations in Uttarakhand. Some of the institutions were initially established by the local people with the formation of management committees for managing and controlling the academic and administrative activities of the schools but later these institutions were brought out under the overall control of the government. Though, the management over the functioning of schools is still with the management committees but the services of teachers and matters related to the system of providing education are governed by the government.

In view of maximising the participation of girls in availing secondary level educational systems the girls have been provided the facility of separate schools beside the mixed schools in all the districts. In fact greater priority has been emphasized in the establishment of girls secondary schools. This is well reflected by the fact that the girls' schools are increasing at the rate of 13.49 per cent as against only 0.20 per cent mixed schools, though the actual numbers of girls' schools are much less than the mixed schools. In all, there are 1311 secondary schools, comprising 1074 mixed schools and 237 girls' schools in Uttarakhand. Annual growth of secondary schools is estimated to be 1.66 per cent points, consisting highest in Dehradun (4.94 per cent) followed by

Pauri Garhwal (2.61 per cent) and Tehri Garhwal (2.25 per cent), but a negative growth of this level of educational institutions has been found in the case of Uttarkashi (1.49 per cent), otherwise the expansion of both mixed schools as well as girls schools is greatly carried out in most of the districts. The appreciable trend in the growth of girls' secondary schools has been observed in Pauri and Uttarkashi, showing an increase of over 25 per cent school in each of the district, it is at lowest level in Nainital (8.08 per cent) closely followed by 9.26 per cent in Chamoli. However, the actual numbers of mixed secondary schools are declining in most of the districts, excluding Dehradun, Pauri and Tehri Garhwal, mainly due to conversion of mixed school into girls' schools.

Table 7 : Expansion of Secondary School

District	1992			1998			Annual Growth		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
Almora	189	20	209	188	35	223	-0.09	12.50	1.12
Nainital	139	33	172	130	49	179	-1.08	8.08	0.68
Pithoragarh	114	15	129	111	25	136	-0.44	11.11	0.90
Uttarkashi	63	4	67	51	10	61	-3.17	25.00	-1.49
Chamoli	119	8	127	118	18	136	-0.14	9.26	1.18
Tehri Garhwal	151	12	163	162	23	185	1.21	15.28	2.25
Dehradun	84	24	108	101	39	140	3.37	10.42	4.94
Pauri Garhwal	202	15	217	213	38	251	0.91	25.56	2.61
Uttarakhand	1061		1192	1074	237	1311	0.20	13.49	1.66

Source : *Shikshya Ki Pragati*, 1992-93 and 1998-99

Further a very high rate of increasing trends is noticed in the strength of teachers in all the districts in general and in districts such as Dehradun (22.42 per cent) and Tehri Garhwal (20.42 per cent), in particular, with an overall growth of 16.83 per cent in Uttarakhand. The lowest increase of teachers has been found in Pithoragarh (0.80 per cent) followed by Uttarkashi (10.94 per cent). Geographically these both the districts

are situated in bordering and high altitude areas of the region where teachers hardly stay willingly for longer duration.

It is surprising to note that the Government has been only involved and concerned in the expansion of secondary schools and increasing the numbers of teachers without considering into account and looking at the situation prevailing in terms of number of children entering in availing of secondary educational system. The analysis shows that the gross enrolment rate of children in secondary schools are consistently declining while very high growth has been registered in opening schools and appointing teachers in most of the districts. Also the number of students per teacher has reduced from 44 in 1992 to 22 students in 1992. In fact, the students-

Table 8 : Enrolments and Teachers in Secondary Schools

Districts	Teacher		Students		Annual Increase		Students-Teacher Ratio	
	1992	1998	1992	1998	Teacher	Students	1992	1998
Almora	1658	3044	69150	66899	13.93	-0.54	42	22
Nainital	1637	3297	84814	96872	16.90	2.37	52	29
Pithoragarh	2030	2127	47981	45145	0.80	-0.99	24	21
Uttarkashi	451	747	19637	14180	10.94	-4.63	44	19
Chamoli	954	1780	37051	36568	14.43	-0.22	39	21
Tehri	1018	2265	38147	41447	20.42	1.44	37	18
Dehradun	1524	3574	79923	78072	22.42	-0.39	52	22
Pauri Garhwal	1536	3106	55546	64569	17.04	-2.71	36	21
Uttarakhand	9922	19940	432249	443752	16.83	-0.44	44	22

Source : *Shikshya Ki Pragati*, 1992-93 and 1998-99

teacher ratio is as low as 18 in Tehri and 19 in Uttarkashi, though it is highest for Nainital (29 students) followed by 22 students, each for Dehradun and Almora. The

enrolments of children are declining at the rate of 0.44 per cent point in Uttarakhand; at highest rate in district Uttarkashi (4.63 per cent) followed by 2.71 per cent in Pauri Garhwal. But, a significant level of increasing trend in the enrolments at secondary school education is indicated in only two districts, Nainital (2.37 per cent) and Tehri Garhwal (1.44 per cent). Over and above it seems that private organizations are significantly contributing in providing the facilities of secondary schools in different districts. In fact, they are involved in providing better quality education. Therefore, the children are more reluctant to avail secondary level of education from better quality private schools rather than with government or government aided schools. As the consequences, the gross enrolments of children in government associated secondary schools are declining over the years.

(b) Access To Secondary Schools

Accessibility situation to government and government aided secondary school facilities has been examined by analysing the distance of villages from the nearest available secondary schools for girls and boys separately. The girls' have lesser accessibility to their secondary schools because these schools are small in numbers than the mixed schools. Hence, the girls have to cover longer distances to reach the girls' schools as compared to the boys' for their schools. Since the girls of over 80 per cent villages and the boys of 36 per cent villages are covering a distance of above 5 kms. for availing secondary education facility. Around 15 per cent villages have the facility of boys secondary schools either in their villages itself or after covering distance of below 1 km. from their villages, but a large majority of the boys (59 per cent) have access to this level of educational facility at the distance ranging from 3 to 5 kms. from their villages. On the other hand, the girls of only around 2 per cent have access to

Table 9 : Access to Secondary School (Boys)

District	Number of Villages by Distance (in Km.)					
	In the Village	Below 1 Km.	1 – 3	3 – 5	5 and above	Total
Almora	179 (5.96)	230 (7.66)	1011 (33.67)	793 (26.40)	790 (26.31)	3003 (100.00)
Nainital	99 (5.66)	80 (4.57)	455 (26.01)	438 (25.04)	677 (38.72)	1749 (100.00)
Pithoragarh	109 (5.02)	172 (7.92)	488 (22.47)	479 (22.05)	924 (42.54)	2172 (100.00)
Uttarkashi	54 (8.17)	90 (13.62)	123 (18.60)	105 (15.89)	289 (43.72)	661 (100.00)
Chamoli	112 (7.21)	108 (6.96)	392 (25.24)	335 (21.57)	606 (39.02)	1553 (100.00)
Tehri Garhwal	149 (7.66)	214 (11.00)	396 (20.36)	385 (19.80)	801 (41.18)	1945 (100.00)
Dehradun	48 (6.62)	41 (5.66)	107 (14.76)	120 (16.55)	409 (56.41)	725 (100.00)
Pauri Garhwal	201 (6.32)	339 (10.66)	953 (29.96)	726 (22.82)	962 (30.24)	3181 (100.00)
Uttarakhand	951 (6.34)	1274 (8.50)	3925 (26.19)	3381 (22.56)	5458 (36.41)	14989 (100.00)

Table 10 : Access to Higher Secondary School (Girls)

District	Number of Villages by Distance (in Km.)					
	In the Village	Below 1 Km.	1 – 3	3 – 5	5 and above	Total
Almora	13 (0.43)	55 (1.84)	252 (8.39)	183 (6.09)	2500 (83.25)	3003 (100.00)
Nainital	14 (0.80)	33 (1.89)	156 (8.92)	173 (9.29)	1373 (78.50)	1749 (100.00)
Pithoragarh	9 (0.41)	39 (1.80)	144 (6.63)	180 (8.29)	1800 (82.87)	2172 (100.00)
Uttarkashi	3 (0.45)	19 (2.87)	33 (4.99)	80 (12.11)	526 (79.58)	661 (100.00)
Chamoli	4 (0.26)	6 (0.39)	42 (2.70)	80 (5.15)	1421 (91.50)	1553 (100.00)
Tehri Garhwal	6 (0.31)	25 (1.29)	81 (4.16)	251 (12.90)	1582 (81.34)	1945 (100.00)
Dehradun	3 (0.41)	4 (0.55)	30 (4.14)	44 (6.07)	644 (88.83)	725 (100.00)
Pauri Garhwal	8 (0.25)	31 (0.97)	108 (3.40)	97 (3.05)	2937 (92.33)	3181 (100.00)
Uttarakhand	60 (0.40)	212 (1.41)	846 (5.64)	1088 (7.27)	12783 (85.28)	14989 (100.00)

girls' secondary school facility at the distance of less than one km. while the girls of another 13 per cent villages have to cover 1 to 5 kms. distance to reach the girls' secondary school. The figure of girls covering larger distances of above 5 kms. for availing this level of education is as high as 982.33 per cent in Pauri (92.33 per cent) followed by Chamoli (91.50 per cent) and lowest in district Nainital (78.50 per cent) and Uttarkashi (79.58 per cent). Though, the analysis depicted that the secondary school facilities are more accessible to boys than the girls in different districts. But it has to be kept in mind that in reality terms, the girls have additional advantages over the boys in access to availing secondary level education. Since, most of the boys' Secondary Schools in Uttarakhand are mixed schools while the girls' secondary schools are established exclusively for girls only. So, the girls have an open opportunity and choice to avail secondary level of education from both girls as well as boys schools. But the boys are restricted from such choice.

2.3 Expansion of Higher Education

Institutions providing higher level of education of graduation and post-graduation level are established by State Government only. There are three Universities and 33 Government Degree Colleges imparting higher education in Uttarakhand. The Degree Colleges are, more or less, distributed equitably in each district of Uttarakhand, but not any Degree College was established between the period 1993 and 1998. The participation of children in utilizing higher education seems to be quite significant in almost the districts. Since the enrolments of children has increased from 40.55 thousands in 1993 to 58.92 thousands in 1998 showing the annual increase of 7.55 per cent. The participation of children in availing higher education is increasing at highest

level in Tehri Garhwal (136.67 per cent) followed by Nainital (61.36 per cent), while a negative growth rate of 2.46 per cent and 1.83 per cent in the trends of enrolments has been observed in districts Chamoli and Uttarkashi respectively. Further it was found that of the total students enrolled in availing higher educational facilities in Uttarakhand, over 50 per cent of them were alone enrolled in different degree colleges located in Dehradun during 1993, but the corresponding figure of children enrolled in Dehradun has reduced at 36.92 per cent in 1998. The second majority of children are availing higher educational facilities in Nainital followed by Pauri Garhwal where the residential Universities for providing higher education are located.

Since the stagnation in the expansion of institutions for providing higher education has been revealed for last over 6 years but a significant attention has been provided in strengthening the provision of teachers according to the increasing trend of students in different districts. For instance, in districts like Uttarkashi and Chamoli, with the decline of enrolments of children, the strength of teachers has subsequently been reduced. The decrease in the strength of teachers in these districts could be due to their transfer another districts because all the degree colleges in the regions are Government Colleges and the teachers can be transferred from one college to another as per requirements. Unprecedented increase in the strength of teachers has been observed in district Nainital (105.18 per cent), where enrolments has increased from 8.10 thousand in 1993 to 14.42 thousands in 1998. Annual growth of teachers has been estimated significantly at higher level as compared to the growth of enrolments only in districts Pauri Garhwal and Nainital. Otherwise, the government has not been in a position to increase the strength of teachers to meet the demand of increasing enrolments in higher educational institutions in remaining seven districts of Uttarakhand. The annual growth of teachers is indicated to be three-folds higher than the growth of

enrolments of students for Uttarakhand, which is mainly the reflection of overwhelming growth rate of teachers in Nainital.

Table 11 : Expansion of Higher Educational Institutions

District	No. of Universities and Degree Colleges		Enrolments		Teachers		Annual Growth in	
	1993	1998	1993	1998	1993	1998	Enrolments	Teachers
Almora	5	5	1479 (3.65)	6924 (11.75)	92	184	61.36	16.67
Nainital	7	7	8990 (22.17)	14418 (24.47)	193	1411	10.06	105.18
Pithoragarh	4	4	3342 (8.24)	4119 (6.99)	144	164	3.87	2.31
Uttarkashi	3	3	1208 (2.98)	1075 (1.82)	52	38	-1.83	-4.49
Chamoli	3	3	2435 (6.01)	2075 (3.52)	113	79	-2.46	-7.17
Tehri Garhwal	2	2	150 (0.37)	1380 (2.34)	15	59	136.67	48.89
Dehradun	7	7	20281 (50.02)	21752 (36.92)	422	388	1.21	-1.34
Pauri Garhwal	5	5	2660 (6.56)	7176 (12.18)	118	332	28.30	30.22
Uttarakhand	36	36	40545 (100.00)	58919 (100.00)	1136	2655	7.55	22.29

2.4 Professional And Technical Institutions

The technical institutions imparting employment oriented technical education are established by both private organisations and State Government. The State Government has assigned the overall responsibility of expansion, supervision and administering over the functioning of these institutions to the department of Technical Education. These institutions are involved in running diploma and certificate level of courses and programmes in different areas of engineering, computer applications etc. to fulfill the industrial need of different categories of manpower. Though, in the past Plans,

significant emphasis has been provided in the expansion of different categories of technical institutions in diversified manner according to the requirement of people in different geographical locations, in improving management system of institutions, development of infra-structural facilities and provision of new avenues of training service, beside efforts to maximise the participation of women in various training programmes and courses. During the Eight Plan period, one Government Girls Polytechnic was established each in Almora and Dehradun to cater the demand of girls students. However the plan outlay for the development of these institutions has decreased from Rs.4000 lakhs in Eight Plan to Rs.3050 lakhs for Ninth Plan periods. In view of meeting

Table 12 : Professional and Technical Institutions

Districts	Polytechnic			Industrial Training Institute			Teachers Training Institute			All Institutions		
	No. of Institutions	Capacity	Actual Admission	No. of Institutions	Capacity	Actual Admission	No. of Institutions	Capacity	Actual Admission	No. of Institutions	Capacity	Actual Admission
Almora	4	216 (100.00)	196 (90.74)	9	872 (100.00)	387 (44.38)	1	110 (100.00)	110 (100.00)	14 (16.28)	1198 (100.00)	693 (57.85)
Nainital	3	980 (100.00)	557 (56.84)	12	1589 (100.00)	1060 (66.71)	1	120 (100.00)	120 (100.00)	16 (18.60)	2689 (100.00)	1737 (64.60)
Pithoragarh	1	108 (100.00)	99 (91.67)	7	672 (100.00)	450 (66.96)	1	100 (100.00)	100 (100.00)	9 (10.47)	880 (100.00)	649 (73.75)
Uttarkashi	1	126 (100.00)	135 (107.14)	3	446 (100.00)	161 (36.10)	2	180 (100.00)	176 (97.78)	6 (6.98)	752 (100.00)	472 (62.77)
Chamoli	1	78 (100.00)	82 (105.13)	6	280 (100.00)	152 (54.29)	2	220 (100.00)	240 (109.09)	9 (10.47)	578 (100.00)	474 (82.01)
Tehri Garhwal	1	78 (100.00)	87 (111.54)	8	732 (100.00)	374 (51.09)	2	330 (100.00)	330 (100.00)	11 (12.79)	1140 (100.00)	791 (69.39)
Dehradun	2	156 (100.00)	156 (100.00)	4	1382 (100.00)	1100 (79.59)	1	50 (100.00)	50 (100.00)	7 (8.14)	1588 (100.00)	1306 (82.24)
Pauri Garhwal	3	305 (100.00)	300 (98.96)	7	1420 (100.00)	1420 (100.00)	4	465 (100.00)	465 (100.00)	14 (16.28)	2190 (100.00)	2185 (99.77)
Uttarakhand	16	2047 (100.00)	1612 (78.75)	56	7393 (100.00)	5104 (69.04)	14	1575 (100.00)	1591 (100.00)	86 (100.00)	11015 (100.00)	8307 (75.41)

Source : Statistical Diary, Uttarakhand, State Planning Institute, Lucknow, 1999.

the increasing demand of technical manpower in organised and non-organised sectors of economies, the Government is also encouraging private sector in establishing technical institutions. The institutions established in private sector have been given no objection certificates. However no graduate level of technical institution has established by private sector so far while significant level of participation has been observed on the part of private sector in establishing technical institutions which are providing diploma and certificate level of education.

The State Government has established at-least one Polytechnic, one Teachers Training Institute and minimum of three Industrial Training Institutes in each of the districts in Uttarakhand. At present, there are 86 technical institutions which are providing diploma and certificate courses and two engineering colleges engaged in imparting engineering degrees of different branches in Uttarakhand. Expecting the case of institutions imparting training to the teachers of primary level education, both polytechnics and industrial training institutions, are not in a position to increase the enrolments of children in different courses and discipline of engineering diploma according to their enrolment capacity.

The Government has established 16 Polytechnics, 14 Teachers' Training Institutions and 56 Industrial Training Institutions with the total admission capacity of 11015 children of these institutions for providing diploma and certificate courses in various disciplines. The number of institutions varied lowest from 7 in Dehradun to highest at 16 in Nainital. The in-take capacity of admission for children in different diploma courses in polytechnic institutions is of 2047 children while only 1612 children are presently enrolled with these institutions in Uttarakhand. In districts Chamoli, Tehri and Uttarkashi, the enrolments of children in polytechnic institutions are significantly

much higher than the actual admission capacity of these institutions. However, in remaining districts, these institutions are hardly in a position to utilize their admission capacity for different diploma programmes. Similarly, the actual numbers of children enrolled in different training programmes and certificate courses introduced by Industrial Training Institutions are much less than the admission capacity of these institutions located in different districts of Uttarakhand. Thus, the limited demand of human resources those are obtaining training certificates relating to different disciplines is well reflecting in almost the districts. Since, of the total admission capacity of 7394 children per year, only 5104 children are presently acquiring training for different disciplines from the industrial training institutions in Uttarakhand.

The intake capacity of Training Institutions involved in imparting training to teachers for Junior and Senior Basic Educational Level is 1575 in Uttarakhand. Since the employment for students completing teacher's training, known as B.T.C, is guaranteed by State Government. The admission of students for BTC generally carried out keeping into consideration the expected future demands of teachers for different subjects in primary schools. As a result, we find that in all the districts the admission capacity of Teachers' Training Institutions is fully utilized. In fact, in district Chamoli, the number of children enrolled for BTC are significantly much higher than the admission capacity of the existing training institutions.

On the whole it seems that increasing attention has been given only in the expansion of Polytechnic and Industrial Training Institutions in diversified manner in different districts of Uttarakhand. However, the types of diploma and certificate courses introduced in different technical institutions in Uttarakhand are similar to that are introduced in the technical Institutions located in plain areas of Uttar Pradesh. The

human resources obtaining diploma and certificate level of training in various discipline from these institutions can find employment opportunities in industrial and corporate sector and related organized economic sectors which are hardly existing in most of the districts of Uttarakhand. As the consequences the enrolments of students in different technical institutions are far less than the admission capacity of students in these institutions. What appears to be lacking in the approach to the expansion of various technical institutions and the introduction of certain diploma and certificate courses in these institutions of different districts of Uttarakhand is, integration between demand for and category of technical human resources in different existing economic sectors and the type and variety of training courses introduced in these technical institutions for development of human resources. The pattern of introducing certain diploma and certificate courses in training institutions should basically be in particular to the expected situation and availability pattern of the kinds of jobs and occupations in different economic sectors in Uttarakhand such that human resources could be assured for employment after acquiring particular job specific training or diploma courses.

3.0 MEDICAL AND PUBLIC HEALTH SERVICES

In the past, initiatives towards the expansion of medical facilities in Uttarakhand have been undertaken through developing a three-tier system of Sub-Centres, Primary Health Centres and Community Health Centres for meeting the medical requirements of the people. According to the prescribed norms, one sub-centre is established over 3000 population and one Primary Health Centre for every 20,000 rural population. With the objective of providing efficient delivery of primary health care the Community Health Centres are being established in rural areas. In view of achieving the Health for All goal

by 2000 AD more than 98 per cent of total outlay allocated for medical has been proposed for the basic minimum services and minimum needs programmes in order to expand and strengthen the basic infrastructure related to primary health care for the period of Ninth Plan. Under this programme the proposed outlay for Ninth Plan is Rs.7000 lakhs, including Rs.1550 lakhs proposed for the year 1997-98.

In the past plans, more especially since Fourth Plan, significant efforts have been made in Uttarakhand to bring about a favourable changes and improvements in the quality of life of population in general and rural poor in particular. Increasing emphasis has been provided for the expansion of primary health centres and sub-centres in remote villages. Since April 1998, reproductive and child health programme has also been launched for improving the health care system of child and to safe motherhood. This programme includes all the components of maternal and child health services, child survival and safe motherhood, family planning services, etc. The plan outlay for medical services has also been consistently increasing over the years during different plan period. The proposed plan outlay for different components of medical and health services has increased from Rs.65 crore for Eighth Plan to Rs.71 crore for Ninth Plan showing an increase of 9.23 per cent points. However, the share of outlay for medical services to the total plan outlay for Uttarakhand has declined from 3.09 per cent in Eighth Plan to 1.60 per cent for Ninth Plan.

3.1 Expansion of Medical And Health Services

The medical and health department of State Government is mainly involved in the expansion of medical facilities in Uttarakhand. However, in certain areas, both in rural as well as in urban segments, the contribution of private institutions and medical

practitioners has observed very appreciable in providing the medical and health services to the local people. The medical facilities to the people are provided through the establishment of Allopathic, Homeopathic and Unani hospitals and dispensaries and Primary Health Centres and sub-centres. Considering the expansion pattern of different types of medical facilities during the period 1993 and 1996, we find a significant level of initiatives have been undertaken by the State Government in providing medical and health facilities particularly through establishing Allopathic hospitals and Primary Health Centres and its sub-centres in different areas of Uttarakhand. Expansion of Homeopathy and Unani hospitals has also been done at considerable level, though relatively at lower level than the Allopathic hospitals and dispensaries.

(a) Expansion of Allopathic Hospitals and Primary Health Centres

There are 561 Allopathic hospitals and 234 Primary Health Centres, besides 1567 Maternity and Child Welfare Centres, which are involved in facilitating health related services in Uttarakhand. However, the Government is providing greater emphasis in the expansion of Allopathic hospitals over the establishment of Primary health centres and sub-centres. Since during the period 1993 and 1996, the growth of Allopathic hospitals has been recorded significantly much higher (39.55 per cent) as compared to Primary Health centres and sub-centres (0.43 per cent). The proportion of allopathic hospitals established in Dehradun are as high as 18.54 per cent while lowest numbers of them are in Tehri Garhwal (6.95 per cent). The concentration of Primary health centre is highest in Nainital (20.94 per cent) followed by Almora (17.52 per cent), while lowest concentration is in district Uttarkashi (5.13 per cent). Also the expansion of Maternity and Child Welfare centres has been carried out relatively at higher extent in district Nainital and Almora. Also, it is noticed that the Government is providing

increasing initiatives in the development of required infrastructural facilities and residential capacity of the hospitals. It is well reflected by the share of amount spent on the purchase of medicines and medical equipment and increasing trend of providing number of bed for people availing medical facilities from these Allopathic hospitals and Primary Health centres.

Table 13 : Expansion of Allopathic Hospitals and Primary Health Centres

District	Allopathic Hospitals		Primary Health Centres		Number of Beds		Maternity & Child Welfare Centres		Per Cent Increase			
	1993	1996	1993	1996	1993	1996	1993	1996	Allopathic Hospital	PHCs	Beds	MC WC
Almora	55 (13.68)	68 (12.12)	41 (17.60)	41 (17.52)	148 (11.80)	995 (12.81)	240 (16.37)	269 (17.17)	23.64	0.00	572.30	12.08
Nainital	61 (15.17)	107 (19.07)	50 (21.46)	49 (20.94)	120 (9.57)	2294 (29.52)	274 (18.69)	352 (22.46)	75.41	-2.00	1811.67	28.47
Pithoragarh	51 (12.69)	59 (10.52)	28 (12.02)	28 (11.97)	220 (17.54)	676 (8.70)	181 (12.35)	215 (13.72)	15.69	0.00	207.27	18.78
Uttarkashi	24 (5.97)	45 (8.02)	12 (5.15)	12 (5.13)	167 (13.32)	288 (3.71)	60 (4.09)	68 (4.34)	87.50	0.00	72.46	13.33
Chamoli	45 (11.19)	54 (9.63)	19 (8.15)	19 (8.12)	228 (18.18)	496 (6.38)	123 (8.39)	145 (9.25)	20.00	0.00	117.54	17.89
Tehri Garhwal	43 (10.70)	39 (6.95)	29 (12.45)	28 (11.96)	127 (10.13)	354 (4.56)	147 (10.03)	159 (10.15)	-9.30	-3.44	178.74	8.16
Dehradun	40 (9.95)	104 (18.54)	22 (9.44)	23 (9.83)	100 (7.98)	1674 (21.54)	133 (9.07)	133 (8.49)	160.00	4.55	1574.00	0.00
Pauri Garhwal	83 (20.65)	85 (15.15)	32 (13.73)	34 (14.53)	144 (11.48)	993 (12.78)	308 (21.01)	226 (14.42)	2.41	6.25	589.58	-26.62
Uttarakhand	402 (100.00)	561 (100.00)	233 (100.00)	234 (100.00)	1254 (100.00)	7770 (100.00)	1466 (100.00)	1567 (100.00)	39.55	0.43	519.62	6.89

Source : 1. Directorate of Health and Directorate of Family Welfare, Lucknow.
2. Statistical Dairy Uttaranchal, State Planning Institute, Lucknow.

(b) Expansion of Ayurvedic and Unani Hospitals

Along with the expansion of medical facilities to the people through increasing the numbers of Allopathic hospitals a considerable progress has also been made in

different districts in the expansion of Ayurvedic and homeopathic hospitals and dispensaries. Each of the districts of Uttarakhand have sufficient numbers of both Ayurvedic and homeopathic hospital facilities, though former category of hospitals are significantly much higher than the latter category of hospitals in almost the districts. In all, there are 374 Ayurvedic and 57 homeopathic hospitals established for providing medical facilities in Uttarakhand. Between the period 1993 and 1998, only 5 Ayurvedic hospitals and 2 homeopathic hospitals were established by the State Government. The facility of beds has been provided to each of the Ayurvedic hospital with an average of 4 beds per hospital while such facility is lacking in most of the homeopathic hospitals. But in totality terms, the percentage increase in the numbers of beds provided to homeopathic hospitals has been estimated relatively much higher (12.50 percent) than in Ayurvedic hospitals (5.18 per cent) during last four years as a result of larger expansion of beds in Pauri Garhwal.

Table 14 : Expansion of Ayurvedic and Homeopathic Hospitals

District	Allopathic Hospitals				Homeopathic Hospitals				Per Cent Increase			
	Number		Beds		Number		Beds		Ayurvedic Hospitals	Homeopathic Hospitals	No.	Beds
	1993	1996	1993	1996	1993	1996	1993	1996	No.	Beds	No.	Beds
Almora	44 (11.92)	44 (11.76)	148 (11.80)	150 (11.37)	7 (12.73)	7 (12.28)	2 (6.25)	—	0.00	1.35	0.00	—
Nainital	37 (10.03)	40 (10.70)	120 (9.57)	132 (10.01)	8 (14.55)	10 (17.54)	6 (18.75)	—	8.11	10.00	25.00	—
Pithoragarh	55 (14.90)	55 (14.71)	220 (17.55)	220 (16.68)	5 (9.09)	5 (8.77)	2 (6.25)	—	0.00	0.00	0.00	—
Uttarkashi	39 (10.57)	39 (10.43)	167 (13.32)	167 (12.66)	4 (7.27)	4 (7.02)	2 (6.25)	—	0.00	0.00	0.00	—
Chamoli	59 (15.99)	61 (16.31)	228 (18.18)	236 (17.89)	7 (12.73)	7 (12.28)	6 (18.75)	4 (11.11)	3.39	3.51	0.00	-33.33
Tehri Garhwal	59 (15.99)	59 (15.77)	127 (10.13)	159 (12.05)	9 (16.35)	9 (15.79)	6 (18.75)	4 (11.11)	0.00	25.20	0.00	-33.33
Dehradun	37 (10.03)	37 (9.89)	100 (7.97)	110 (8.34)	8 (14.55)	8 (14.04)	6 (18.75)	—	0.00	10.00	0.00	—
Pauri Garhwal	39 (10.57)	39 (10.43)	144 (11.48)	145 (10.99)	7 (12.73)	7 (12.28)	2 (6.25)	28 (77.78)	0.00	0.69	0.00	1300.00
Uttarakhand	369 (100.00)	374 (100.00)	1254 (100.00)	1319 (100.00)	55 (100.00)	57 (100.00)	32 (100.00)	36 (100.00)	1.36	5.18	3.64	12.50

Source : 1. Directorate of Health and Directorate of Family Welfare, Lucknow.
 2. Statistical Dairy Uttaranchal, State Planning Institute, Lucknow for the year 1999.

3.2 Access to Medical and Public Health Facilities

Since we found in preceding analysis that the government has been providing significant efforts in providing medical and health facilities in different districts through the establishment of Allopathic, Ayurvedic and Homeopathic hospitals and dispensaries and Primary health centres and allocating a significant amount of financial outlay in improving the service quality of hospitals. In fact the number of both hospitals and beds provided in those hospitals for per lakh of population in Uttarakhand are significantly much higher than Uttar Pradesh. Number of hospitals and beds per lakh population in Uttarakhand stand for 10.77 and 122.51 as against only 3.56 and 51.84 for U.P. respectively. However, it has to be considered in mind that providing increasing emphasis on the expansion of different forms of medical services would not be a sufficient mechanism to fulfill the medical need of various communities but the equitable distribution in different locations with making them easily accessible to different groups of people would be equally important instrumental measure for providing equal opportunity and maximising the use of available medical services by different segment of communities living in various geographical areas. Considering these facts into account we have further attempted to examine at the emerging situation of access to different categories of medical facilities and services to the local communities in different districts of Uttarakhand.

(a) Access to Allopathic and Primary Health Services

The expansion of Allopathic hospitals, Health centres and other medical services has been done mainly in urban areas and villages located nearby roads and thus, a clear cut differences are prevailing in the availment pattern of different health related

Table 15 : Access to Allopathic Hospitals and Primary Health Centres

Districts	Within Village	Below 1 km.	1-3 kms.	3-5 kms.	5+ kms.	Total
Almora	91 (3.03)	147 (4.90)	683 (22.74)	603 (20.08)	1479 (49.25)	3003 (100.00)
Nainital	114 (6.52)	108 (6.17)	443 (25.33)	475 (27.16)	609 (34.82)	1749 (100.00)
Pithoragarh	73 (3.36)	107 (4.93)	299 (13.77)	359 (16.53)	1334 (61.41)	2172 (100.00)
Uttarkashi	53 (8.02)	78 (11.80)	117 (17.70)	115 (17.40)	298 (45.08)	661 (100.00)
Chamoli	47 (3.03)	49 (3.16)	207 (13.33)	188 (12.10)	1062 (68.38)	1553 (100.00)
Tehri Garhwal	69 (3.55)	6 (0.31)	238 (12.23)	357 (18.35)	1275 (65.56)	1945 (100.00)
Dehradun	48 (6.62)	33 (4.55)	58 (8.00)	87 (12.00)	499 (68.83)	725 (100.00)
Pauri Garhwal	37 (1.16)	67 (2.11)	278 (8.74)	222 (6.98)	2577 (81.01)	3181 (100.00)
Uttarakhand	532 (3.55)	595 (3.97)	2323 (15.50)	2406 (16.05)	9133 (60.93)	14989 (100.00)

Source : Statistical Diary, Uttaranchal, State Planning Institute, Lucknow, 1999.

Table 16 : Access to Ayurvedic Hospitals and Dispensaries

Districts	Within Village	Below 1 km.	1-3 kms.	3-5 kms.	5+ kms.	Total
Almora	42 (1.40)	71 (2.36)	297 (9.89)	362 (12.06)	2231 (74.29)	3003 (100.00)
Nainital	36 (2.06)	47 (2.69)	174 (9.95)	249 (14.23)	1243 (71.07)	1749 (100.00)
Pithoragarh	55 (2.53)	84 (3.87)	262 (12.06)	356 (16.39)	1415 (65.15)	2172 (100.00)
Uttarkashi	38 (5.75)	35 (5.29)	95 (14.37)	113 (17.10)	380 (57.49)	661 (100.00)
Chamoli	59 (3.80)	70 (4.51)	276 (17.77)	228 (14.68)	920 (59.24)	1553 (100.00)
Tehri Garhwal	54 (2.78)	3 (0.15)	232 (11.93)	294 (15.12)	1362 (70.02)	1945 (100.00)
Dehradun	30 (4.14)	24 (3.31)	81 (11.17)	91 (12.55)	499 (68.83)	725 (100.00)
Pauri Garhwal	--	--	--	--	3181 (100.00)	3181 (100.00)
Uttarakhand	314 (2.09)	334 (2.23)	1417 (9.45)	1693 (11.30)	11231 (74.93)	14989 (100.00)

Source : Statistical Diary, Uttaranchal, State Planning Institute, Lucknow, 1999.

Table 17 : Access to Homeopathic Hospitals and Dispensaries

Districts	Within Village	Below 1 km.	1-3 kms.	3-5 kms.	5+ kms.	Total
Almora	6 (0.20)	5 (0.17)	17 (0.57)	27 (0.90)	2948 (98.16)	3003 (100.00)
Nainital	6 (0.34)	63 (3.60)	99 (5.66)	74 (4.23)	1507 (86.17)	1749 (100.00)
Pithoragarh	4 (0.18)	4 (0.18)	23 (1.06)	56 (2.59)	2085 (95.99)	2172 (100.00)
Uttarkashi	3 (0.45)	2 (0.30)	6 (0.90)	13 (1.98)	637 (96.37)	661 (100.00)
Chamoli	5 (0.32)	124 (7.98)	276 (17.77)	228 (14.69)	920 (59.24)	1553 (100.00)
Tehri Garhwal	7 (0.36)	--	21 (1.08)	35 (1.80)	1882 (96.76)	1945 (100.00)
Dehradun	8 (1.10)	2 (0.28)	12 (1.66)	3 (0.41)	700 (96.55)	725 (100.00)
Pauri Garhwal	1750 (55.01)	311 (9.78)	296 (9.31)	262 (8.23)	562 (17.67)	3181 (100.00)
Uttarakhand	1789 (11.94)	511 (3.41)	750 (5.00)	698 (4.66)	11241 (74.99)	14989 (100.00)

Source : Statistical Diary, Uttaranchal, State Planning Institute, Lucknow, 1999.

services among the people residing in remote villages and villages located nearby small towns or along roadside. The population living in remote areas and those lacking access to road facilities are hardly availing the medical facilities because they are not in a position to cover the longer distances and meet out the transport expenses. In Uttarakhand over 60.93 per cent of the villages are situated at the distance of more than 5 kms. from the nearest available medical and health facilities, in fact the proportion of villages is as high as 81.01 per cent in Pauri Garhwal followed by 60 per cent each in Dehradun and Chamoli. Only the population of 7.52 per cent villages are availing the opportunity of medical facility after covering the distance of less than one kilometre and remaining about one-third of villages are situated at the distance of 1 to 5 kms. from the nearest Allopathic and Primary Health Centre. The situation in accessibility to these

medical facilities of people in different districts is prevailing at similar pattern. However, the proportion of villages having the facility of Allopathic hospitals and Primary Health Centres within the concerned villages are highest in Uttarkashi 8.02 per cent followed by Dehradun (6.62 per cent) and Nainital (6.52 per cent).

(b) Access to Ayurvedic and Homeopathic Hospitals

The expansion of Ayurvedic and Homeopathic Hospitals has been carried out at lesser extent than the Allopathic and Primary Health Centres in different districts of Uttarakhand. As a result they are less accessible to a larger segments population. Since, the people of around 75 per cent villages receive the facility of either Homeopathic or Ayurvedic medical facilities after covering the distance of above 5 kms. and another 11.30 per cent and 5.0 per cent villages are situated at the distance of 3 to 5 kms. from the nearest Ayurvedic hospital and Homeopathic hospital respectively. Though the villages covered with the facility of Homeopathic medical facilities are significantly higher than those are covered with the facility of Ayurvedic medical facility. Since the population of about 14 per cent villages can avail the facility of Homeopathic medical facility after visiting less than 1 kms. from their villages while at this distance the Ayurvedic medical facility is access to only 4.33 per cent of the villages.

(c) Access to Family Planning and Child Care Centres

In the past during different Plans, considerable efforts have been made in the expansion of child health care centres and maternity homes in view of improving the health conditions of mothers and their infant children and reducing the problems of increasing mortality rate of children. In fact, various sub-centres for child care and

services on temporary basis and mobile centres are also in operation in certain remote areas and locations. It is well reflected by the fact that around half of the villages are located at the distance of less than 3 kms. from the nearest available Family Planning and Child Care Centre. In fact, around 21 per cent villages are access to these facilities in their own villages or it available at the distance of less than 1 kms. while the population of around 30 per cent find the opportunity of these medical facilities beyond the distance of 5 kms. Access to concerned medical facilities are well visualized among the villages of districts Pauri Garhwal and Nainital, where the population of 14.46 per cent and 15.29 per cent villages respectively is availing concerned facility after covering above 5 kms. of distance from their villages, while 15 per cent of villages in former and 19 per cent villages in latter districts have this facility within their villages (Table 18).

Table 18 : Access to Family Planning and Child Care Centres/Sub-Centres

Districts	Within Village	Below 1 km.	1-3 kms.	3-5 kms.	5+ kms.	Total
Almora	256 (8.52)	210 (6.99)	902 (30.04)	647 (21.55)	988 (32.90)	3003 (100.00)
Nainital	325 (18.58)	157 (8.98)	540 (30.87)	460 (26.30)	267 (15.27)	1749 (100.00)
Pithoragarh	210 (9.67)	262 (12.06)	542 (24.95)	457 (21.04)	701 (32.28)	2172 (100.00)
Uttarkashi	66 (9.98)	53 (8.02)	126 (19.06)	115 (17.40)	301 (45.54)	661 (100.00)
Chamoli	139 (8.95)	121 (7.79)	412 (26.53)	342 (22.02)	539 (34.71)	1553 (100.00)
Tehri Garhwal	175 (9.00)	8 (0.41)	329 (16.92)	484 (24.88)	949 (48.79)	1945 (100.00)
Dehradun	138 (19.03)	80 (11.03)	78 (10.76)	167 (23.04)	262 (36.14)	725 (100.00)
Pauri Garhwal	477 (15.00)	520 (16.35)	1226 (38.54)	498 (15.65)	460 (14.46)	3181 (100.00)
Uttarakhand	1786 (11.92)	1411 (9.41)	4155 (27.72)	3170 (21.15)	4467 (29.80)	14989 (100.00)

Source : Statistical Diary, Uttaranchal, State Planning Institute, Lucknow, 1998.

4.0 ACCESS TO DRINKING WATER FACILITIES

Uttarakhand is possessing favourable advantages in the availability of water in abundance. Various large rivers generating from the glaciers established in proximity to high mountain areas, streams and the natural springs are the main sources for meeting the demands of drinking water of people. However, most of the rivers flow in deep valleys therefore the stock of water available in rivers can hardly be used directly for drinking purposes. Thus, the water from rivers is mainly lifted through pipelines and used for both drinking as well as irrigation purposes. Moreover, increasing deforestation and environmental degradation in various areas of Uttarakhand have considerably reduced the discharge level of water from natural water resources. The underground water level has been reduced to a large extent. Only in less than 50 per cent villages, the springs either yield or sprout water only during the rainy season, when sufficient rain or surface water is already available. Decrease in spring discharge, ranging from 25 per cent to 75 per cent, have led to the decline of spring-fed rivers, some 30 to 40 per cent during the last decade.

In the past, government have initiated a number of drinking water schemes and programmes but because of the absence of inadequate support in implementation and maintenance from the part of local people, poor supervision, lack of proper knowledge and assessment made about the capacity of water resources in generating or discharging the volume of water during the summer season and delayed release of finances to meet the construction costs, a significant numbers of such programmes and schemes have not been completed.

Table 19 : Access to Drinking Water Facility

Districts	Within Village	Below 1 km.	1-3 kms.	3-5 kms.	5+ kms.	Total
Almora	2326 (77.46)	168 (5.59)	506 (16.85)	3 (0.10)	--	3003 (100.00)
Nainital	1745 (99.77)	4 (0.23)	--	--	--	1749 (100.00)
Pithoragarh	2171 (99.95)	1 (0.05)	--	--	--	2172 (100.00)
Uttarkashi	661 (100.00)	--	--	--	--	661 (100.00)
Chamoli	1553 (100.00)	--	--	--	--	1553 (100.00)
Tehri Garhwal	1826 (93.88)	46 (2.37)	24 (1.23)	41 (2.11)	8 (0.41)	1945 (100.00)
Dehradun	725 (100.00)	--	--	--	--	725 (100.00)
Pauri Garhwal	3181 (100.00)	--	--	--	--	3181 (100.00)
Uttarakhand	14188 (94.66)	219 (1.46)	530 (3.54)	44 (0.29)	8 (0.05)	14989 (100.00)

Source : Statistical Diary, Uttaranchal, State Planning Institute, Lucknow, 1998.

It is claimed by the Government that of the 66 towns existing in Uttarakhand, 54 (81.82 per cent) are supplied with safe drinking water but only 10 towns are having adequate water supply because of rapid increase in population, extension of area and reduction in water discharge level of different sources. Though, over 95 per cent villages are reported to have the facility of drinking water facility within their villages but it is difficult to analyze that whether the drinking water is adequately available to these villages. Further, the district level analysis shows that all the villages existing in Uttarkashi, Chamoli, Dehradun and Tehri Garhwal have been provided the facility of drinking water within their concerned villages while significantly a larger proportion of population of villages in district Almora (23 per cent) followed by Tehri Garhwal (6 per

cent) and less than one per cent villages of Nainital are lacking such facility within their villages. Rather, the population of 8 villages have access to drinking water facility at the distance of above 5 kms. from their villages in Tehri Garhwal.

5.0 HOUSING AND SANITATION

Significant emphasis has also been given for providing financial aid in the form of loan and subsidy to the people living below poverty line and scheduled castes and scheduled tribes communities for the construction of houses both in rural and urban areas. During the period of Eighth Plan an outlay of Rs.850 lakhs was proposed for rural housing programme but only 47.88 per cent was utilized for this purpose. The programmes such as Indira Awas Yojana and Nirbal Varg Awas Yojana are in operation under the rural housing schemes. The responsibility of providing sanitation facilities in rural areas have been given to the village panchayats, while the facility of sewerage is being provided by Jal Nigam in urban areas only. The proposed outlay for the expansion of sanitation facilities in rural areas and sewerage facilities in urban areas for Ninth Plan period is Rs.700 lakhs and Rs.5400 lakhs respectively.

The Indira Awas Yojana initiated for catering the housing demand for socio-economically poor people is providing houses free of cost to homeless family in rural areas, was introduced in 1985-86. Initially, the basic objective of the introduction of this scheme was to facilitate the housing problems of Scheduled Castes and Scheduled Tribes. Later after 1993-94, the scheme has been opened for all communities with providing 60 per cent reservation in favour of SC/ST communities in the distribution of housing benefits. The selected beneficiaries are given the financial assistance of Rs.22000 for the construction of houses. The beneficiaries are authorised to construct

houses themselves and to develop the design and purchase of material for house construction but the house should be constructed in the area of 20 square metres. With the understanding that a large number of households in rural areas could not be covered under the Indira Awas Yojana, the Government introduced a scheme known as Credit-cum-Subsidy programme for rural housing for Ninth Plan. The target group under this scheme would be rural households having an annual income of upto Rs.32,000. Moreover, a maximum of 60 per cent of the funds allocated under this scheme as subsidy shall be utilized in financing the house construction of Scheduled Castes and Scheduled Tribes.

6.0 ACCESS TO COMMUNICATION FACILITIES

Expansion of different communication and information sources have significant importance in providing knowledge and awareness about certain required information on different aspects to the people living in various un-accessible and remote areas. However, the communication systems in Uttarakhand are poorly developed. For example, the facility of telephone and telegraph is mainly available in small towns and district headquarters, and in some extent the rural people are access to these facilities through visiting the block headquarters. There are, however, 54183 telephone connections, 3401 private PCOs, 890 telegraphic offices and 2179 post offices established in Uttarakhand. In fact the number of telegraph offices per lakh of population in Uttarakhand stand for 12 as against 4.8 for Uttar Pradesh as a whole. Accordingly, the number of post offices per lakh of population are significantly higher in Uttarakhand (41.3) than for U.P. (13.8) but the corresponding figure is much higher for purely hilly districts Pithoragarh (18.3), closely followed by Almora (17.0), Chamoli (16.8) and Pauri Garhwal (13.2).

Table 20 : Access to the Facility of Post Offices

Districts	Within Village	Below 1 km.	1-3 kms.	3-5 kms.	5+ kms.	Total
Almora	443 (14.75)	482 (16.05)	1364 (45.42)	501 (16.68)	213 (7.10)	3003 (100.00)
Nainital	236 (13.49)	218 (12.46)	618 (35.33)	461 (26.36)	216 (12.36)	1749 (100.00)
Pithoragarh	390 (17.96)	352 (16.21)	727 (33.47)	350 (16.11)	353 (16.25)	2172 (100.00)
Uttarkashi	118 (17.85)	67 (10.14)	174 (26.32)	123 (18.61)	179 (27.08)	661 (100.00)
Chamoli	337 (21.70)	224 (14.42)	620 (39.93)	258 (16.61)	114 (7.34)	1553 (100.00)
Tehri Garhwal	242 (12.44)	19 (0.98)	659 (33.88)	526 (27.04)	499 (25.66)	1945 (100.00)
Dehradun	181 (24.97)	90 (12.41)	176 (24.28)	140 (19.31)	138 (19.03)	725 (100.00)
Pauri Garhwal	608 (19.11)	65 (2.04)	198 (6.22)	223 (7.01)	2087 (65.62)	3181 (100.00)
Uttarakhand	2555 (17.05)	1517 (10.12)	4536 (30.26)	2582 (17.22)	3799 (25.35)	14989 (100.00)

Source : Statistical Diary, Uttaranchal, State Planning Institute, Lucknow, 1998.

Since a larger proportion of population, at least one person from about every 48 households is migrated outside Uttarakhand. Therefore, in the absence of various communication sources such as telephone, etc. the post offices are playing an important role as the means of communication between migrants and their families in rural areas. However, so far, only 17.05 per cent villages have been covered under the facility of post offices and another 10.12 per cent villages are access to this facility at the distance of less than one km. The populations of over one-fourth of villages have to travel over 5 kms. from their villages to find the facility of post office and around 47 per cent villages are located at the distance ranging from 1 to 5 kms. from the nearest located post office. The shortage of post offices seems very serious in districts Pauri

Garhwal and Uttarkashi. Where around 66 per cent villages in former and 27 per cent villages in latter district are finding the facilities of post offices at a nearest distance of above 5 kms. The proportions of villages having this facility within their villages itself are highest in Dehradun (24.97 per cent) followed by Chamoli (21.70 per cent).

Table 21 : Access to the Telegraph Office Facility

Districts	Within Village	Below 1 km.	1-3 kms.	3-5 kms.	5+ kms.	Total
Almora	124 (4.13)	116 (3.86)	493 (16.42)	431 (14.35)	1839 (61.24)	3003 (100.00)
Nainital	64 (3.66)	98 (5.60)	180 (10.29)	280 (16.01)	1127 (64.44)	1749 (100.00)
Pithoragarh	11 (0.51)	28 (1.29)	103 (4.74)	136 (6.26)	1894 (87.20)	2172 (100.00)
Uttarkashi	12 (1.82)	7 (1.06)	30 (4.54)	35 (5.29)	577 (87.29)	661 (100.00)
Chamoli	4 (0.26)	28 (1.80)	101 (6.50)	106 (6.82)	1314 (84.62)	1553 (100.00)
Tehri Garhwal	23 (1.18)	31 (1.59)	109 (5.60)	130 (6.69)	1652 (84.94)	1945 (100.00)
Dehradun	12 (1.66)	23 (3.17)	68 (9.38)	112 (15.45)	510 (70.34)	725 (100.00)
Pauri Garhwal	81 (2.55)	88 (2.77)	280 (8.80)	300 (9.43)	2432 (76.45)	3181 (100.00)
Uttarakhand	331 (2.21)	419 (2.80)	1364 (9.10)	1530 (10.20)	11345 (75.69)	14989 (100.00)

Source : Statistical Diary, Uttaranchal, State Planning Institute, Lucknow, 1998.

The facility of telegraph is only available in sub and main post offices and is access after covering a larger distances. It is well depicted by the fact that over three-fourths of villages are located over 5 kms. away from the nearest available telegraph office. Only 5 per cent villages are access to this facility within a distance of less than one km., while the population of remaining 19 per cent villages are finding the opportunity of this facility after covering 1 to 5 kms. from their villages. Accessibility situation to the facility of telegraph is noticed very serious in two border districts,

Uttarkashi and Pithoragarh where over 87 per cent villages are situated at the distance of above 5 kms. from the nearest telegraphic offices and only the population 2.88 per cent villages of former district and 1.80 per cent villages of latter district have access to this facility within the distance of 1 km. from their villages.

7.0 FACILITY OF ELECTRICITY

As indicated in the preceding analysis that one of the most important resources Uttarakhand is water, providing the region with a niche for the generation of hydro-electricity. The situation that visualized at present is that in spite of having vast potentials of hydro-power a larger number of villages are lacking the facility of electricity in the region because no significant efforts have been undertaken in the past Plans for exploiting the available opportunities and maximizing the utilization of available stock of water for generation of electricity. It is estimated that Uttarakhand is possessing the potential of generating about 800 Mw electricity through small and micro hydro system. However, the achievement level of hydropower is estimated to be only 27.30 Mw by the end of Eighth Plan period (1992-1997).

In purely hilly areas the electricity is mainly used for the domestic purposes such as lighting, cooking and heating but in plain areas of Districts Nainital and Dehradun the electricity is consumed for industrial and agricultural purposes also, besides domestic purposes. Of the total 13723 lakh units of electricity being annually consumed in Uttarakhand, the share of electricity used for performing industrial and agricultural activities is estimated to be around 82 per cent for Nainital and 75 per cent for Dehradun. And the proportion of electricity consumed for domestic purposes in hilly districts ranges from 80.52 per cent for Uttarkashi to 50.72 per cent for Almora. Over

the years, traditional sources of energy, mostly fuelwood, have been substituted by non-conventional energy system such as solar and wind energy devices and bio-gas, though their contribution to total energy use still low at below 10 per cent points.

So far, significant progress has been made in providing the facility of electricity to the people in different districts. Annually, nearly 4 per cent of the villages are brought out under the facility of electricity in the past. In fact, annual increase of electrified villages is found as high as around 8 per cent in each of the districts Pithoragarh and Pauri Garhwal. But, 21 per cent villages in Uttarakhand are still lacking the facility of electricity. Significantly highest progress has been achieved in the electrification of villages in districts Dehradun, closely followed by Nainital and Almora but around 23 per cent villages in Pauri Garhwal do not have the facility of electricity.

Table 22 : Electrified Villages

Districts	Total No. of Villages	Electrified Villages		Annual increase of Electrified Villages 1994-98
	1991	1994	1998	
Almora	3024(100.00)	2439(80.65)	2538(83.93)	4.06
Nainital	1799(100.00)	1822(98.74)	1670(92.83)	8.34
Pithoragarh	2186(100.00)	1450(66.33)	1564(71.55)	7.86
Uttarkashi	678(100.00)	607(89.53)	635(93.66)	4.61
Chamoli	1569(100.00)	1145(72.78)	1226(78.14)	7.07
Tehri Garhwal	1959(100.00)	1370(69.93)	1458(74.43)	6.42
Dehradun	746(100.00)	718(96.25)	744(99.73)	3.62
Pauri Garhwal	3205(100.00)	2014(62.84)	2168(67.64)	7.65
Uttaranchal	15166(100.00)	11565(76.26)	12003(79.14)	3.79

Source : Statistical Diary, Uttaranchal, State Planning Institute, Lucknow, 1995and 1098.

8.0 EXPANSION OF ROAD TRANSPORT FACILITIES

Road transport is the main mode of transport, though horses, ponies and other animals are used for carrying goods in some areas. Due to typical geographical and difficult topographical conditions existing in Uttarakhand development of road transport and its easy access to people living in different geographical locations has an important significance. In this context, significant initiatives have been undertaken to increase the

Table 23 : Access to Road Transport Facility

Districts	Within Village	Below 1 km.	1-3 kms.	3-5 kms.	5+ kms.	Total
Almora	508 (16.91)	463 (15.42)	826 (27.51)	490 (16.32)	716 (23.84)	3003 (100.00)
Nainital	1486 (84.97)	117 (6.69)	80 (4.57)	49 (2.80)	17 (0.97)	1749 (100.00)
Pithoragarh	647 (29.79)	241 (11.10)	266 (12.24)	325 (14.96)	693 (31.91)	2172 (100.00)
Uttarkashi	126 (19.06)	58 (8.77)	140 (21.18)	102 (15.43)	235 (35.56)	661 (100.00)
Chamoli	315 (20.28)	132 (8.50)	364 (23.44)	268 (17.26)	474 (30.52)	1553 (100.00)
Tehri Garhwal	345 (17.74)	38 (1.95)	497 (25.55)	362 (18.61)	703 (36.15)	1945 (100.00)
Dehradun	297 (40.97)	58 (8.00)	76 (10.48)	85 (11.72)	209 (28.83)	725 (100.00)
Pauri Garhwal	81 (2.55)	88 (2.77)	280 (8.80)	300 (9.43)	2432 (76.45)	3181 (100.00)
Uttarakhand	3805 (25.39)	1195 (7.97)	2529 (16.87)	1981 (13.22)	5479 (36.55)	14989 (100.00)

Source : Statistical Diary, Uttaranchal, State Planning Institute, Lucknow, 1998.

length of roads through linking increasing numbers of villages with road transport network, on priority basis in the past plans. Increasing emphasis on the development and construction of road network has been taken mainly after the Chines war against India in 1962. At present every bordering districts are well connected with the road

transport facilities in the region. The length of *pucca* (metalled) road per lakh of population has increased from 49.3 kms. in 1960-61 (pre-Chinese War) to 163.15 Kms. in 1980-81 and 200.91 kms. in 1994-95. The Plan outlay for the construction and improving the conditions of roads has been consistently increasing over the years. It increased from Rs.297.50 crore in Eighth Plan to Rs.1052 crore in Ninth Plan periods. Also, the share of outlay for transport sectors to total Plan outlay has increased from 14.13 per cent in Eighth Plan to 23.75 per cent for Ninth Plan, showing an overall increase of 254 per cent points during last two plan periods.

The metalled roads in Uttarakhand passes through 3805 villages, constituting only 25.39 per cent of villages; around 8 per cent villages have access to road facility within a distance of less than one km., while the population of 37 per cent villages and 30 villages have respectively to walk more than 5 kms. and 1 to 5 kms. to reach the nearest available road facility. Expansion of roads has been carried out at a much faster level in districts Nainital and Dehradun in the sense that around 85 per cent villages in former and 41 per cent villages in later district are connected with the road facility while very low per cent of villages in Pauri Garhwal (2.55 per cent) followed by 16.91 per cent in Almora and closely followed by 17.74 per cent villages in Tehri Garhwal are linked with roads. The population of a very high percentage of villages of district Pauri Garhwal (76.45 per cent) followed by Tehri Garhwal (36.15 per cent) is access to road facilities after walking a distance of above 5 kms.

9.0 OVERALL IMPROVEMENTS IN ACCESS TO SOCIAL INFRASTRUCTURAL FACILITIES

In the preceding analysis we devoted our attention mainly to examine the prevailing situation in the expansion of and access to various social infrastructural

facilities across the districts and in aggregate at regional level. Further, attempts have been made to look into the trends emerging in improving the situation of certain identified components of social infrastructures over the years in Uttarakhand. It is expected that this analysis will provide a clear-cut understanding about the extent and priority considerations extended in favour of making access to different categories of social services in the past plans and the actual changes that occurring in improving accessibility to these services. This exercise is undertaken by analysing the extent of

Table 24 : Improvements in Access to Different Social Services

Type of Facility	Number of Villages by Distances								Per cent Change			
	1992				1996							
	Below 1 Km.	1-3 Kms.	3-5 Kms.	5+ kms.	Below 1 Km.	1-3 Kms.	3-5 Kms.	5+ kms.	Below 1 Km.	1-3 Kms.	3-5 Kms.	5+ kms.
1. Pucca Road	5000 (33.44)	2529 (16.92)	1981 (13.25)	5479 (36.65)	6538 (43.62)	2510 (16.75)	1994 (13.30)	3948 (26.34)	30.76	-0.75	0.66	-27.94
2. Drinking Water	14931 (99.87)	14 (0.10)	5 (0.03)	--	14407 (96.12)	530 (3.53)	44 (0.29)	8 (0.05)	-3.51	+3685.71	+780.00	100.00
3. Medical (PHC & Allopathic)	1127 (0.85)	2323 (15.54)	2406 (16.09)	9133 (61.09)	1449 (9.87)	2662 (17.78)	2581 (17.22)	8258 (55.09)	28.57	14.59	7.27	-9.58
4. Family Planning & Child Care Centres	2551 (17.06)	2932 (19.61)	3012 (20.15)	6455 (43.78)	3197 (21.33)	4155 (27.72)	3170 (21.45)	4467 (29.80)	25.32	41.71	5.25	-30.80
5. Post Offices	4072 (27.24)	4536 (30.34)	2582 (17.27)	3799 (25.41)	4420 (29.49)	5479 (36.55)	2949 (19.87)	2102 (14.02)	8.55	20.79	14.21	-44.67
6. Telegraph Office	750 (5.02)	1384 (9.12)	1630 (10.23)	11345 (75.89)	784 (5.23)	1403 (9.36)	1667 (11.12)	11096 (74.03)	4.40	2.86	8.95	-2.19
7. Junior Basic School	11378 (76.11)	3271 (21.88)	284 (1.97)	7 (0.05)	11662 (77.80)	2903 (19.37)	342 (2.28)	82 (0.55)	2.50	-11.25	16.33	1071.43
8. (a) Senior Basic School (Boys)	2814 (18.82)	4439 (29.89)	3352 (22.42)	4345 (29.06)	3442 (22.96)	5164 (34.45)	2981 (19.89)	3402 (22.70)	22.32	16.33	-11.07	-21.70
8. (b) Senior Basic School (Girls)	663 (4.43)	1487 (9.95)	1384 (9.32)	11416 (96.36)	909 (6.06)	1870 (12.48)	1514 (10.10)	10696 (71.36)	37.10	25.76	8.81	-6.31
9. (a) High School (Boys)	2186 (14.62)	3797 (25.40)	3177 (21.25)	5790 (38.73)	2225 (14.84)	3925 (26.19)	3381 (22.58)	5458 (36.41)	1.78	3.37	6.42	-5.73
9. (b) High School (Girls)	135 (0.90)	754 (5.04)	1000 (6.69)	12981 (86.70)	272 (1.81)	846 (5.64)	1088 (7.28)	12783 (85.28)	101.48	12.20	8.80	-1.37

Source : Statistical Diary, Uttarakhand, State Planning Institute, Lucknow, 1994 and 1998.

changes that have taken place in terms of the distance of villages from the nearest available different categories of social infrastructural facilities. It will be worthwhile to mention here that there has been an addition of 39 villages, mainly due to conversion of small helmets into villages, during this reference period.

The analysis shows that the accessibility situation to different social infrastructural facilities excepting the case of drinking water and Junior Basic Schools has been improving at significant level in Uttarakhand. However, at certain extent, we are not confident about the reliability of data, which is analyzed and presented in Table 24. Doubts over the reliability of available data were well reflected in distributing the villages according to their distance from the nearest available facility of drinking water and Junior Basic Schools. Since the proportion of villages, those were located at the distance of above 3 kms. from the facility of Junior Basic School has increased from 2.02 per cent in 1992 to 2.83 per cent in 1996 and the accessibility situation of villages to different level of schools is deteriorating rather than favourable changes over the years. This could be only in the case of either the close down of certain numbers of Junior Basic Schools or the increase in the numbers of villages those were already lacking this level of school facility at a shorter distances. However, providing second kind of explanation is defeated by the fact that the number of villages reported to have access to Junior Basic School facility after covering the distance of above 5 kms. have jumped from 7 to 82 in total of districts Almora, Pithoragarh, Tehri Garhwal and Dehradun but the actual number of increased villages in these districts together account for only 23. Also, a remarkable progress has been witnessed in the expansion of Junior Basic Schools in all the above four districts during the reference period. Therefore, it is very doubtful that a large numbers of them have been closed during this period.

Further, the analysis depicted that the problems in scarcity of drinking water is largely increasing in different villages. Since, the proportion of villages obtaining water from the resources available in their villages itself or from the distance of less than one km. has declined at 3.51 per cent while the distance of 516 villages has increased to 1 to 3 kms. and it increased 3 to 5 kms. for 39 villages and above five kms. for 8 villages during the period 1992 to 1996. This increasing problems for obtaining drinking water has been observed very acute and serious in the 65 villages of Tehri Garhwal and 509 villages of Almora.

In the matter related to the expansion pattern of remaining infrastructural facilities it is well depicted that increasing initiatives though, in the past, the Government has been providing in the expansion of different facilities, while little attention has been given in the properly distribution of these social services among different geographical locations at accessible distances to different segment of population. This is well reflected in the expansion of certain social infrastructural facilities such as Allopathic hospitals, primary health centres, post and telegraph offices and secondary schools, etc. those are concentrated mainly in small towns, and it's adjoining villages and more accessible areas to road transport facilities. But in all, it has also to be accepted that there has been a significant improvements in the expansion and accessibility of certain facilities such as Junior Basic Schools, drinking water, roads, etc. in the region. A more significant fact is that there has been a remarkable progress in the expansion of girls Senior Basic School and High School facilities at accessible distances during last five years. Also, accessibility to nearest metalled road has improved as significant extent for over 30 per cent of the villages and the proportion of villages located at the distance of above 5 kms. from the road has declined at 27.94 per cent during 1992 and 1996.

10.0 CONCLUSIONS

Providing increasing emphasis towards the expansion of different social infrastructural facilities and making them easily accessible to different communities has been visualized as an important policy measure and option for addressing the persisting problems of poverty, unemployment, income inequality and stagnation in the process of economic development in Uttarakhand. Also, adequately expansion and equitable distribution of basic social-services such as education, medical and health, and certain amenities of life, which are directly associated in bringing qualitative improvements among human resources, among different geographical locations and approaching for maximization the participation of different community people in the utilization of these available services have been universally recognized as an instrumental measure for balanced human resource development, reducing the increasing trend of out-migration of active and productive human resources and thereby enhancing their contribution in the overall process of economic development in Uttarakhand.

No doubt, the planners and policy makers have well realized the significance of developing various social infrastructural facilities in view of achieving desired sustainable growth and development of different economic sectors in general and human resources in particular in the past plans. This is well reflected through examining the kinds of programmes and policies emphasized and the amount of outlay allocated for favour of developing and expansion of various social services at least after the Fourth Plan period. The outlay proposed for developing social infrastructure has been consistently increasing, in fact, more sharply than the cases of developing most productive economic sectors such as agriculture and manufacturing sectors over the past different plans. The share of outlay allocated for social sector development has

increased from 27.63 per cent points in Seventh Plan to 30.25 per cent points for Ninth Plan. Both, the per capita investment on the expansion of social services and its share to total plan outlay is indicated to be significantly higher in Uttarakhand as compared to Uttar Pradesh as a whole in the past plans. Several concessions and relaxation in the criteria fixed based on the size of population and geographical spread for the expansion of educational and medical facilities has also been practiced for favour of Uttarakhand due to the experienced problems of accessibility and geographical spread in different locations, which perpetuating lacking participation of local people in the availment of given social-infrastructure facilities.

The outcome of providing increasing emphasis on the expansion of different social services is directly well reflected while an assessment is undertaken in examining the trends of increase, in number of educational institutions, hospitals and primary health centres, family welfare centres in connecting villages with the roads, and providing the facilities of communication, drinking water, housing and electricity to increasing numbers of villages over the years. However, the concentration of various social services such as the sources and means of communications, medical and health related facilities have been largely in small towns, district headquarters and areas having well accessibility to roads. In remote and less accessible areas the demands of local people for medical and health services is being met through the establishment of medical sub-centres and mobile health services. Significant improvements in access to medical services of people has also been reflected in different districts. During last five years, over 28 per cent of the villages have been provided the facility of Primary Health Centres within a distance covering less than one kilometre; along with 25 per cent village population have access to family planning and child care centres either in their own villages or after covering the distance of below one kilometre.

However, relatively larger numbers of villages are still lacking the facility of drinking water at accessible distances, in spite the fact that the Uttarakhand is possessing a greater advantages and niche in having variety of water resources and larger stock of water available through natural springs and a number of large rivers originated from its glaciers and flowing over almost the areas of Uttarakhand. The proportion of villages lacking the facility of drinking water and covering a larger distance for obtaining water is consistently increasing over the years. Let us see at what extent the recently introduced World Bank sponsored project "Swajal Yojana" can meet out the existing problems of drinking water in different villages.

Incidentally, considerable progress has been achieved in linking the villages with the facility of roads with increasing the length of pucca roads in different parts of Uttarakhand. Despite prevailing situation of typical geographical conditions and a much wider differences among the locations of villages in Uttarakhand the metalled road passes through linking over one-third of the villages. This has improved the mobility situations of human resources among different areas within as well as outside Uttarakhand. Expansion of roads has been carried out at a much faster and larger level in districts Nainital and Dehradun in the sense that 85 per cent villages in former and 41 per cent villages in latter district are connected with road facilities while very low proportion of villages (2.55 per cent) are linked with roads in Pauri Garhwal. Over and above, it seems that development of roads has been provided very high priority consideration as compared for developing remaining social services, which is directly evidenced by the fact that during last five years alone, around 31 per cent of the villages have been linked with the road facility and the proportions of villages those were earlier located at the distance of above 5 kms. from nearest road has reduced at 28 per cent.

Similarly, significant progress has been achieved in providing the facility of electricity among the villages. But, in spite the fact that there are vast potentials for generation of electricity through mini and micro hydro-power system still a large number of villages are lacking the facility of electricity because no significant efforts have been undertaken in favour of exploiting the available opportunities and maximizing the utilization of available stock of electricity. Annually, nearly 4 per cent of the villages are brought out under the facility of electricity in the past but still 21 per cent villages are lacking this facility. There is a huge gap between energy demand and energy supply. The government claims to be supplying electricity to over three-fourths of the villages in Uttarakhand, but this is doubtful if assessed in terms of the timeliness and quantity of electricity available to the households and production units. The very low income from the sale of electricity (Rs.1.2 million in Uttarakhand compared to Rs.55 million in Himachal Pradesh) casts doubts on the government claims that 12,003 villages (79.14 per cent) in Uttarakhand have been given electricity, thereby serving about 62 per cent of the population.

Initiatives towards bringing increasing numbers of children belonging to socially and economically disadvantaged communities, such as scheduled castes and scheduled tribes population into education system has also been carried out through providing priority in the expansion of school facility in areas dominated by them, introducing the provision of free ship, scholarship, book-aids and hostel accommodation with the consideration to maximize their participation in availing different levels of educational system and bringing a drastic reduction in prevailing inequalities in the utilization pattern of education of different segments of socio-economic groups of population for last several generations. Increasing emphasis has also been provided for

the expansion of primary level educational schools in remote and geographically less accessible areas.

The direct implications of providing special thrust on the development of educational facilities have been visualized mainly in the expansion of educational institutions, which are involved in imparting primary and secondary level of education. Significant priority has also been emphasized in the appointments of teachers though increasing their strength. As a result the strength of teachers is increasing at much higher level than the growth of enrolments of children availing different level of education. And the students-teacher ratio at primary and secondary level of educational system has been declining over the years.

This seems that in view of achieving the goal of universalisation of primary education the State Government has been mainly concerned in the expansion of school facilities, providing increasing emphasis on spending larger amounts of plan outlay on the salaries of teachers and staff of education department and increasing the strength of teachers in schools while little attention has been provided in bringing qualitative improvements in the teaching-learning process. As a result the rates of gross enrolments at junior and senior basic educational levels are consistently declining in almost the districts since last decade. Annually the enrolment at junior basic schools are decreasing at the rate of 2.27 per cent points. Also the average strength of students per school has declined from 114 in 1992 to 84 in 1998. Contrary to this, the strength of teachers has been growing at the rate of 1.65 per cent at junior basic level and 0.47 per cent at senior basic level of education. As a result the students-teacher ratio has declined from 48 children in 1992 to at 35 children during 1998. No doubt, significant progress has been achieved in making accessible to primary education. Since around

80 per cent of the villages has been so far been provided the facility of primary schools as per the norms fixed for the establishment of schools.

The secondary schools, which are involved in imparting high school and intermediate level of education have also shown an appreciable growth of 1.66 per cent annually during the past, but the girls' schools are increasing at much faster rates than the boys' schools, though in actual number of schools, the proportion of former category of schools is much less (18.08 per cent) than the latter category of schools. However, no systematic approach has been initiated in the expansion of school facilities according to the geographical spread and the kinds of problems arising in terms of locational situation of villages and topography of the region. Since a very high proportion of girls (85.28 per cent) and boys (36.41 per cent) have access to secondary school facility after covering a distance of above 5 kms. from their villages. However, it may be mentioned here that the girls have an additional opportunity for availing secondary level of educational facilities with both the categories of schools, while such opportunity is lacking for boys. The enrolments of children at secondary level education are declining at the rate of 0.06 per cent annually as against 2.10 per cent growth of teachers and 1.66 per cent of schools.

Over and above, it seems that the private organizations and trusts are playing an important role in providing better quality educational opportunities of both primary as well as secondary level of education, which has resulted the attraction of increasing number of children to enrolled themselves with privately owned educational institutions rather than with government aided or government schools. Lacking interest from the part of teachers in devoting adequate attention in bringing improvements in teaching methods, and lessons to the students, irregular attendance of teachers in schools,

lacking practices of supervision and evaluation as adopted by the school inspectors over the activities performed by teachers in the schools and lacking involvement of local communities in the school activities are the most important factors attributing decrease in enrolment rates of children in Government owned schools.

The facility of higher education is, by and large, equitably distributed among the different districts. Also the participation of children in availing this level of education is significantly increasing but at lower rate than the increasing proportion of teachers. A good number of technical institutions such as Polytechnics, Industrial Training Institutes and Teachers Training Institutes have also been established for providing diploma and certificate level of education to the human resources in each of the districts of Uttarakhand. However, in most of the districts, the actual numbers of children enrolled in Polytechnics and ITIs are considerable at much lower extent than the actual admission capacity of these institutions. It seems that the limited demand for human resources those completing diploma and certificate courses with these institutions in different districts of Uttarakhand is the main contributing factor behind that the human resources are hardly reluctant to avail the facility of technical education. The human resources obtaining diploma and certificate level of training in various disciplines from technical institutions located here, can find employment opportunities mainly in industrial and Corporate sectors and related organized sectors, which are hardly existing in most of the districts of Uttarakhand. Thus, what appears to be lacking in initiating for expanding the facilities of technical education and the introduction of various diploma and certificate courses in these institutions, is integration between demand for and category of technical human resources in different economic sectors and the types of training courses introduced in these institutions for developing human resources. The introduction of certain diploma and certificate courses in different

technical institutions should be basically on the pattern of expected demands of different categories of technical human resources for particular economic activities so that the human resources could be assured for employment after acquiring particular job/occupation specific training or diploma courses.

Medical and health related facilities in Uttarakhand are extended through the expansion of allopathic, ayurvedic and homeopathic hospitals, Primary Health Centres and Maternity and Child Welfare centres. Significant increase in the establishment of hospitals with providing beds and number of doctors for each of the category of hospitals has been observed in the past. However, the large allopathic, ayurvedic and homeopathic hospitals were found mainly concentrated in the larger cities, and in district headquarters, where the private hospitals and clinics are also contributing a major role in providing health and medical facilities but the Primary Health Centres are established in most of the block headquarters and are mainly catering the medical requirements of rural people. However, the population of over three-fourths villages has to cover over 5 kms. distance for availing any kind of medical facility. In the recent past, significant progress has been achieved in covering a larger numbers of villages with the establishment of sub-centres of Family Planning and Child Care services in view of improving the health conditions of mothers and their infant children and reducing the problems of increasing mortality rates of children.

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